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CALIFORNIA MARINE FISH LANDINGS FOR 1972

By
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and

DESIGNATED COMMON NAMES OF CERTAIN MARINE ORGANISMS OF CALIFORNIA

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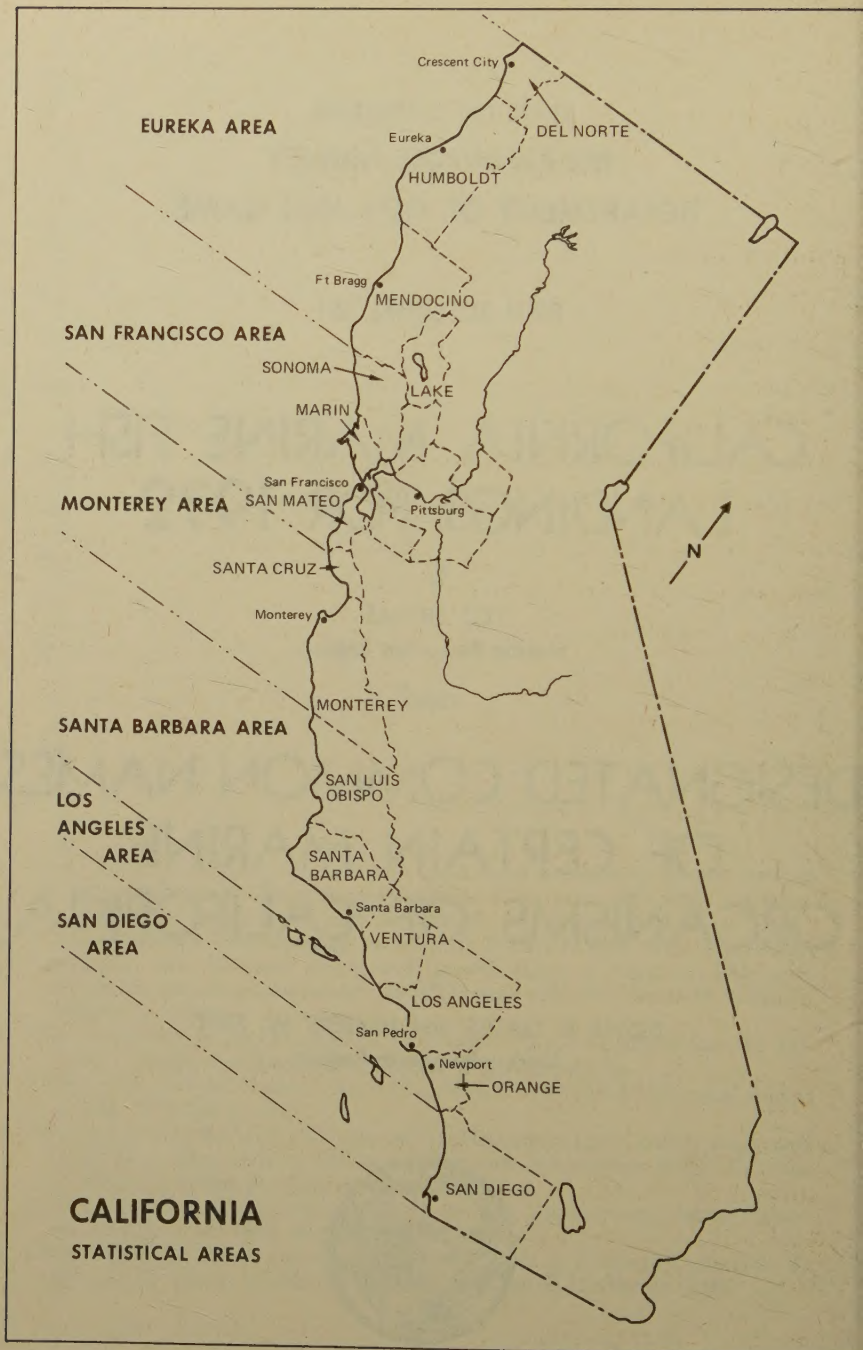

Figure 1. Geographical areas used to summarize California Fisheries statistics.

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CALIFORNIA MARINE FISH LANDINGS FOR 1972

LEO PINKAS
Marine Resources Region

INTRODUCTION

The protection, propagation, and wise utilization of California's living marine resources (established as common property by statute, Section 1600, Fish and Game Code) is dependent upon the welding of biological, environmental, economic, and sociological factors. Fundamental to each of these factors, as well as the entire management process, are harvest records. The California Department of Fish and Game began gathering commercial fisheries landing data in 1916. Commercial fish catches were first published in 1929 for the years 1926 and 1927. This report, the 32*nd* in the landing series, is for the calendar year 1972. It summarizes commercial fishing activities in marine as well as fresh waters and includes the catches of the sportfishing partyboat fleet.

Preliminary landing data are published annually in the circular series which also enumerates certain fishery products produced from the catch. The 1972 figures are contained in Circular No. 47, "Statistical Report of Fresh, Canned, Cured and Manufactured Fishery Products for 1972" (Bell, 1973).

California's fishery statistics are based on a system whereby fish dealers, processors, and operators of sportfishing partyboats send duplicate copies of their landing records to the Department. The system and methods used to collect commercial fishing records were fully described in Fish Bulletin 86, which reported the catch for 1950. In the intervening years, methods and equipment have been modified as conditions warranted, but the basic principles remain unchanged. Parke Young (1969) described the partyboat fishing log system in Fish Bulletin 145.

Statistical compilations are normally the result of the combined efforts of many people, this report is no exception. Credit for this publication truly belongs to the cooperating units of the fishing industry (fishermen, wholesale fish dealers, canners, and processors) and Department personnel responsible for the market receipt system which is designed to gather fishery landing data (namely, Fish and Game wardens, field office clerks, marine and anadromous fisheries biologists, and all members of the Marine Fisheries Statistical unit at Long Beach). My appreciation and thanks are extended to one and all.

Portions of the salmon statistics were collected under the Anadromous Fish Act Project: California A F C-12, Ocean Salmon Study and supported by the National Marine Fisheries Service, Department of Commerce, Washington, D.C.

EXPLANATION OF TABLES

Tables in this bulletin summarize statistics of various fishery operations in California during 1972. Five types of activity are being reported this year: landings of commercial fishermen in California; imports of tuna from other states or foreign countries destined for processing in California; sport catches of the partyboat fleet; landings of inshore species used for bait; and catches of boats supplying live bait for sportfishing. In addition, the species composition of the 1972 ocean salmon landings is reported.

Statistics presented in this publication do not encompass all fishing activities in California since not all of these functions are reported. For example: sportfishing from private boats or from shore is not reported, nor is the quantity of fish imported for use in a fresh state compiled. Some facets of the sportfishing industry, other than the partyboat fleet are sampled by Department biologists but since these are specific studies the results are not reported here.

The landing bulletin series has, for over 20 years, been relatively stable in its format and presentations.

New fisheries (sea urchin), evolving fishery practices (aerial scouting for swordfish), and changing sociological needs (environmental impact statements) all create demands for additional and/or new statistical presentations. To satisfy these needs some table formats have been altered (Table 5, fishing boat lengths), new tables have been added (speciation and percent composition of the salmon catch), and additional detail has been included in existing tables (speciation of abalone landings, various tables).

Principal changes this year encompass nomenclature, new abalone conversion factors, commercial fish landings from inland waters separated from marine landings, and inclusion of landing data of marine plants.

SOURCE OF DATA

Data concerning each commercial landing, inshore bait delivery, and import are recorded on receipts by fish dealers or processors at the time of delivery. Copies of these documents are transmitted to the Department twice each month. For each transaction, the dealer is required to provide the species, weight and price paid to the fishermen. The date of the transaction, the fisherman's name, the fishing boat registration number, and intended use of the fish (canning, fresh, etc.) also are required. In addition, type of gear used and the specific area where the fish were caught usually are reported.

Partyboat catch data are obtained from logs completed by the boat operator. The log for each trip indicates the number of each species taken, number of anglers, number of hours fished, and the specific area fished. The date, boat name, and boat registration number also are furnished. Copies of these records are sent to the Department monthly.

Operators of boats supplying live bait keep a voluntary daily log showing number of sets, species caught, area fished, and number of

scoops of bait sold. Copies of these logs are furnished the Department monthly. While these records represent most live bait landings, the reported catch should be regarded as minimal.

Clerical personnel at field offices in Eureka, Menlo Park, Long Beach, and San Diego maintain contact with fish dealers, local Fish and Game Wardens, and field biologists to insure that the records are accurate and transmitted promptly. All data received by the Department are carefully edited for completeness and coded to facilitate processing. The information then is punched into cards and summarized with electric tabulating machines.

STATISTICAL AREAS

California is divided into seven areas for the purpose of reporting fisheries statistics (Figure 1). Each statistical area is named for a major port within its boundaries. Sacramento area landings were, for many years, incorporated with San Francisco totals and other general summary tables. This procedure resulted in the co-mingling of marine, fresh, and brackish water species in the reports. In a departure from this tradition the 1972 data are presented with all inland water fish landings removed from the usual tables and grouped into two separate tables, Appendix I and II. Should this format prove useful, these tabulations will be elevated to table status in future presentations.

SPECIES

The common and scientific names of species reported here have been revised to conform with the list prepared by Gates and Frey (1974). Some species are reported only collectively when, for economic or other reasons, their separation is not practical (Table 1).

The "Miscellaneous (Animal Food)" category consists of a variety of low value species caught by trawling. Since it is impractical for dealers to report the many species separately, Department biologists periodically sample this catch to determine its species composition. Based on this sampling, the percentage and weight compositions of 1972 animal food landings are as follows:

Species	Percent	Pounds
Pacific hake	41.2	152,462
Sablefish	32.9	121,747
English sole	10.2	37,745
Dover sole	6.6	24,424
Rockfish (8 species)	5.6	20,723
Ten other species	3.5	12,952
	100.0	370,053

Salmon landings reported in the tables are for all species combined. However, biologists from the Department's Anadromous Fisheries Branch sample the commercial and sport salmon fisheries to determine species composition of catches and to obtain estimates of the unreported skiff catch. The sampling methods and results for 1952 through 1965 were detailed by Jensen and Swartzell (1967); since 1966, results have been presented annually in the landing bulletins.

The miscellaneous fish category, as reported in the 1972 landings tables, consists of small volume deliveries of the following species: lamprey, California moray, striped mullet, Pacific halibut, sargo, shad, spotted cabrilla, and wolf-eel. Speciation of skates and rays, on the market receipts was poor; the reported species consisted of skates, rays, stingrays and shovelnose guitarfish. Miscellaneous mollusks consisted of mussels, quahogs, sea snails, soft shell clams, and Washington clams.

Marine plant harvest data have not been routinely published by the Department. Frey (1971) presented a table of Giant Kelp, *Macrocystis spp.*, landings by open and leased beds dating back to 1916. Requests for kelp harvesting information are increasing: partially in response to the need to evaluate numerous proposed nearshore developments, and in response to the need to evaluate animal resources in relation to their total environment. An updated version of kelp landings is presented (Appendix III).

CONDITION

Most fish and shellfish are landed in a round condition; however, some species, such as barracuda, salmon, and swordfish usually are eviscerated or cleaned before being brought ashore. The condition of fish landed or shipped into the state cannot always be determined so the tables represent summarized weights as reported to the Department without regard to condition.

Since 1963, oyster landings have been reported as packed weight rather than weight in the shell. Packed weight is estimated to be 15.5% of the live weight for Pacific oysters and 10.9% for eastern oysters.

Landings reported in measurements other than weight are equated to pounds using conversion factors determined by periodic sampling.

Abalone number to weight conversion factors were reexamined during the 1970–71 abalone season by a Department biological team. From December 1970 through July 1971, over 4,866 individual abalone (of all species) were measured and weighed, and new conversion factors were calculated. These conversion factors, rounded off to whole numbers, were used to convert the 1972 abalone landings in this bulletin.

Factors used in 1972 were:

Abalone, red	45	pounds per dozen
Abalone, pink	25	pounds per dozen
Abalone, green	25	pounds per dozen
Abalone, black	25	pounds per dozen
Abalone, white	20	pounds per dozen
Clam, Washington	7	pounds per dozen
Crab, Dungeness	2	pounds each
Live bait	12.5	pounds per scoop

VALUE

Value is computed from prices paid to fishermen. Area value figures are ascertained by summing the value of all individual landings in that area. The value for an individual port within an area is calculated from weights of each species landed at that port and the average price paid for the species in that area. When the price paid for an individual landing is not specified, the average price paid for the species in the area is used.

INSHORE BAIT

The inshore bait fishery takes several kinds of fish and invertebrates from bays, rivers, and intertidal regions. Records of this fishery have been published as a separate summary in landing bulletins since 1963. Conversion factors used for inshore bait for 1972 were as follows:

Crab, sand	0.041	pound	per dozen
	4.5	pounds	per gallon
Crab, shore	0.013	pound	per dozen
Mudsucker	0.465	pound	per dozen
Mussel	80.000	pounds	per sack
Sculpin, staghorn	0.465	pound	per dozen
Shrimp, ghost	0.082	pound	per dozen

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TABLE 1

Common and Scientific Names of Fishes, Crustaceans, and Mollusks in the 1972 Catch

Common name	Scientific name
FISHES	
Anchovy, northern	*Engraulis mordax*
Barracuda, California	*Sphyraena argentea*
Bass, rock	
Kelp bass	*Paralabrax clathratus*
Sand bass, barred	*Paralabrax nebulifer*
Spotted sand bass	*Paralabrax maculatofasciatus*
Blacksmith	*Chromis punctipinnis*
Bonito, Pacific	*Sarda chiliensis*
Cabezon	*Scorpaenichthys marmoratus*
Cabrilla, spotted	*Epinephelus analogus*
Croaker	
White	*Genyonemus lineatus*
Queenfish	*Seriphus politus*
Dolphinfish	*Coryphaena hippurus*
Eel, wolf	*Anarrhichthys ocellatus*
Flounder	
Arrowtooth	*Atheresthes stomias*
Starry	*Platichthys stellatus*
Flyingfish	*Cypselurus* spp.
Freshwater fish	
Carp	*Cyprinus carpio*
Sacramento blackfish	*Orthodon microlepidotus*
Greenling, kelp	*Hexagrammos decagrammus*
Grenadiers	
California	*Nezumia stelgidolepis*
Pacific	*Coryphaenoides acrolepis*
Hake, Pacific	*Merluccius productus*
Halfmoon	*Medialuna californiensis*
Halibut	
California	*Paralichthys californicus*
Pacific	*Hippoglossus stenolepis*
Herring, Pacific	*Clupea harengus pallasii*
Killifish, California	*Fundulus parvipinnis*
Lamprey	*Lampetra* spp.
Lingcod	*Ophiodon elongatus*
Mackerel	
Jack	*Trachurus symmetricus*
Pacific	*Scomber japonicus*
Moray, California	*Gymnothorax mordax*
Mudsucker, longjaw	*Gillichthys mirabilis*
Mullet, striped	*Mugil cephalus*
Opaleye	*Girella nigricans*
Perch, ocean	Members of family Embiotocidae
Pompano (Butterfish, Pacific)	*Peprilus simillimus*
Rockfish	Members of family Scorpaenidae
Sablefish	*Anoplopoma fimbria*
Salmon	
King	*Oncorhynchus tshawytscha*
Pink	*Oncorhynchus gorbuscha*
Silver	*Oncorhynchus kisutch*
Sanddab	*Citharichthys sordidus*
Sardine, Pacific	*Sardinops sagax caeruleus*
Sargo	*Anisotremus davidsonii*
Sculpin	*Scorpaena guttata*
Sculpin, Pacific staghorn	*Leptocottus armatus*
Sea bass, giant	*Stereolepis gigas*
Seabass, white	*Cynoscion nobilis*
Shark	
Members of family Alopiidae, Carcharhinidae, Lamnidae, and Squalidae.	
Sheephead, California	*Pimelometopon pulchrum*
Skates and Rays	
Members of family Rhinobatidae, Rajidae, and Myliobatididae	
Smelt	
Jacksmelt	*Atherinopsis californiensis*
Night	*Spirinchus starksii*
Surf	*Hypomesus pretiosus*
Whitebait	*Allosmerus elongatus* and *Spirinchus starksii*
Sole	
Butter	*Isopsetta isolepis*
Dover	*Microstomus pacificus*
English	*Parophrys vetulus*
Petrale	*Eopsetta jordani*
Rex	*Glyptocephalus zachirus*
Rock	*Lepidopsetta bilineata*
Sand	*Psettichthys melanostictus*
Swordfish	*Xiphias gladius*
Tuna	
Albacore	*Thunnus alalunga*
Bigeye	*Thunnus obesus*
Bluefin	*Thunnus thynnus*
Skipjack, tuna	*Euthynnus pelamis*
Skipjack, black	*Euthynnus lineatus*
Yellowfin	*Thunnus albacares*
Turbot	
Curlfin	*Pleuronichthys decurrens*
Diamond	*Hypsopsetta guttulata*
Hornyhead	*Pleuronichthys verticalis*
Wahoo	*Acanthocybium solanderi*
Whitefish, ocean	*Caulolatilus princeps*
Yellowtail	*Seriola dorsalis*
AMPHIBIA	
Bullfrog	*Rana catesbeiana*
CRUSTACEANS	
Crab	
Dungeness	*Cancer magister*
Rock	*Cancer* spp.
Sand	*Emerita analoga*
Shore	*Hemigrapsus* spp.
Sheep	*Loxorhynchus* spp.
Crayfish	*Astacus trowbridgei*
Lobster, spiny	*Panulirus interruptus*
Prawn	
Ridgeback	*Eusicyonia ingentus*
Spot	*Pandalus platyceros*
Shrimp	
Bay	*Crago* spp.
Ghost, Bay	*Callianassa californiensis*
Ocean, Pacific	*Pandalus jordani*
Red	*Hippolysmata californica*
ECHINODERMS	
Starfish, common	*Pisaster* spp.
Sea urchin	*Strongylocentrotus* spp.
MOLLUSKS	
Abalone	
Black	*Haliotis cracherodii*
Green	*Haliotis fulgens*
Pink	*Haliotis corrugata*
Red	*Haliotis rufescens*
Threaded	*Haliotis assimilis*
White	*Haliotis sorenseni*
Clam	
Freshwater	*Corbicula fluminea*
Jackknife, California	*Tagelus californianus*
Littleneck	*Protothaca staminea*
Purple	*Sanguinolaria nuttalli*
Quahog, Northern	*Mercenaria mercenaria*
Softshell	*Mya arenaria*
Washington, common	*Saxidomus nuttalli*
Mussel	
Bay	*Mytilus edulis*
Rock	*Mytilus californianus*
Octopi	*Polypus* spp.
Oyster	
Eastern	*Crassostrea virginica*
Giant Pacific	*Crassostrea gigas*
Snail, sea	*Liparis atlanticus*
Squid, market	*Loligo opalescens*

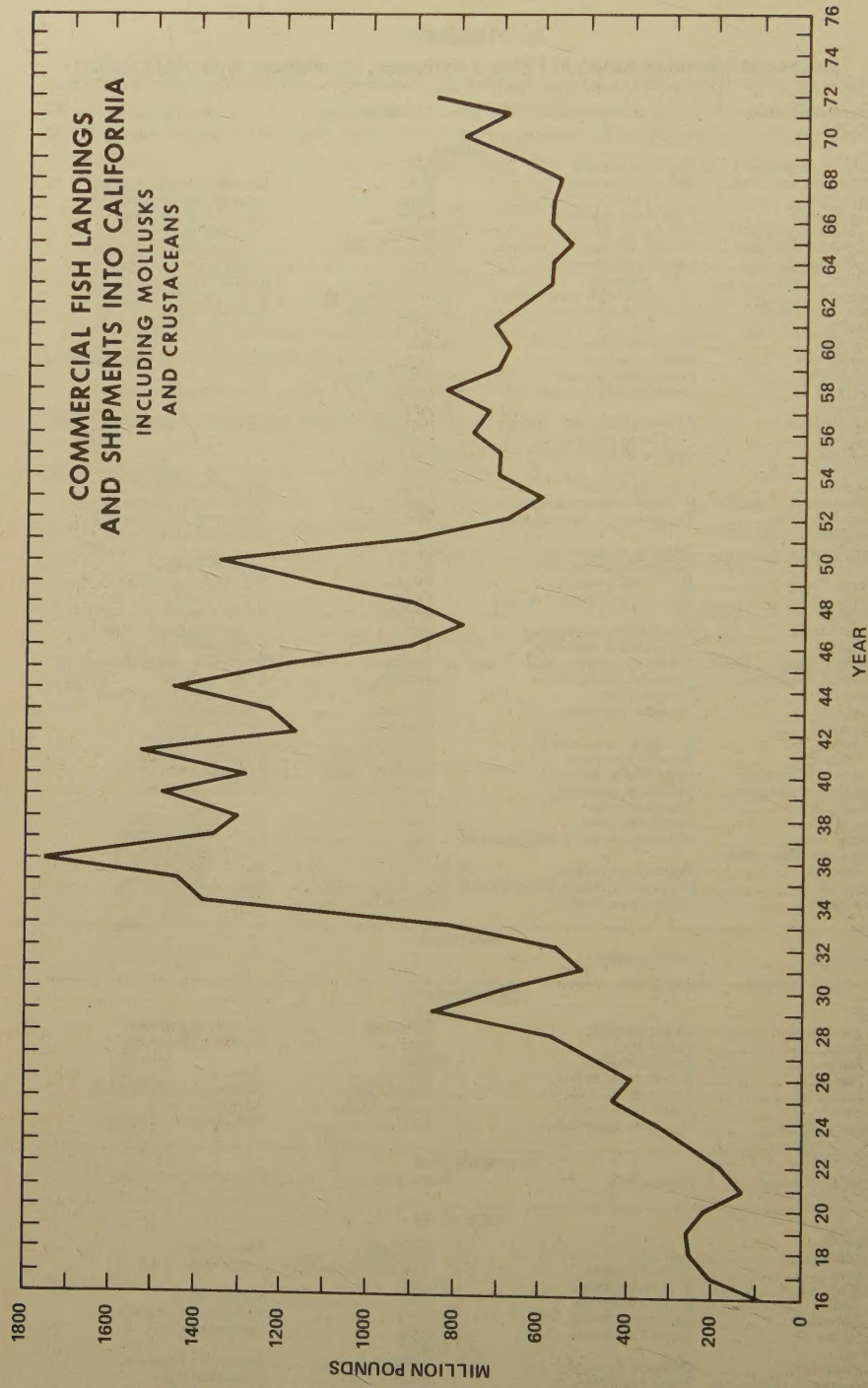

Figure 2. Total Annual landings and shipments into California (see Table 2). Sardine deliveries to reduction ships, 1930–38 are included. Since 1965, tunas are the only species included in shipments.

TABLE 2

Total Annual Landings and Shipments Into California of Commercial Fish, Mollusks, and Crustaceans; Includes Sardine Deliveries to Reduction Ships During 1930 Through 1938

Year	Thousands of pounds	Year	Thousands of pounds
1916	95,003	1946	919,822
1917	209,877	1947	795,499
1918	261,134	1948	900,467
1919	266,270	1949	1,135,339
1920	222,004	1950	1,366,676
1921	135,348	1951	904,114
1922	182,343	1952	694,996
1923	253,875	1953	618,919
1924	340,446	1954	713,410
1925	437,502	1955	710,713
1926	394,964	1956	772,551
1927	487,166	1957	738,550
1928	583,527	1958	832,919
1929	856,854	1959	713,423
1930	702,189	1960	694,663
1931	502,390	1961	725,253
1932	556,139	1962	663,107
1933	821,805	1963	592,899
1934	1,390,798	1964	591,131
1935	1,448,017	*1965	544,480
1936	1,764,900	1966	591,533
1937	1,362,984	1967	589,028
1938	1,310,596	1968	567,214
1939	1,486,535	1969	672,793
1940	1,297,518	1970	798,415
1941	1,528,892	1971	687,995
1942	1,173,414	1972	845,699
1943	1,234,049		
1944	1,459,456		
1945	1,216,501		

* Beginning in 1965 only tuna shipments are recorded.

TABLE 3

Landings and Shipments of Leading Species Ranked by Pounds *

1971				1972			
Species	Rank	Thousands of pounds	Thousands of dollars	Species	Rank	Thousands of pounds	Thousands of dollars
Yellowfin tuna	1	168,365	$36,211	Yellowfin tuna	1	278,487	$65,377
Skipjack tuna	2	154,942	30,570	Anchovy, northern	2	138,202	1,678
Anchovy, northern	3	89,705	1,093	Skipjack tuna	3	123,768	28,851
Albacore tuna	4	68,131	22,675	Albacore tuna	4	97,132	38,882
Jack mackerel	5	59,883	2,416	Jack mackerel	5	51,118	2,153
Squid	6	31,517	760	Bluefin tuna	6	30,974	7,033
Pacific bonito	7	20,269	1,841	Pacific bonito	7	22,313	2,055
Bluefin tuna	8	19,828	4,207	Dover sole	8	22,082	1,808
Dover sole	9	14,249	1,178	Squid	9	20,159	534
Rockfish	10	11,169	942	Rockfish	10	16,421	1,490
Dungeness crab	11	9,662	2,821	Sablefish	11	8,396	649
Salmon	12	8,117	4,757	Salmon	12	6,423	4,830
Sablefish	13	4,424	290	Petrale sole	13	3,575	599
Petrale sole	14	3,704	611	Lingcod	14	3,246	339
Ocean shrimp	15	3,081	400	Abalone	15	3,093	1,248
English sole	16	2,964	316	English sole	16	3,002	342
Abalone	17	2,945	953	Ocean shrimp	17	2,490	374
Lingcod	18	2,098	201	Rex sole	18	1,662	201
Bigeye tuna	19	1,871	394	Dungeness crab	19	1,563	889
Rex sole	20	1,468	169	Black skipjack	10	1,543	123
All others		9,603	2,658	All others		10,050	3,064
Totals		**687,995**	**$115,463**	**Totals**		**845,699**	**$162,519**

* Only the tunas are included in the shipments.

TABLE 4

Number of Licensed Commercial Fishermen

Area of residence	License year* 1971–72	1972–73
Eureka	1,846	1,870
Sacramento	455	488
San Francisco	1,711	2,035
Monterey	686	800
Santa Barbara	871	941
Los Angeles	2,028	2,070
San Diego	1,652	1,688
Alaska, Washington and Oregon fishermen licensed in California	848	524
Mexican nationals licensed in California	26	39
Other	58	58
Totals	**10,181**	**10,513**

* April 1 to March 31.

TABLE 5

Number of Registered Fishing Boats by Length

Length group in feet	License year* 1971–72	1972–73	Length group in feet	License year* 1971–72	1972–73
0– 10	5	3	101–105	8	8
11– 15	128	128	106–110	7	6
16– 20	807	954	111–115	5	4
21– 25	553	679	116–120	11	8
26– 30	645	707	121–125	6	5
31– 35	600	628	126–130	9	7
36– 40	787	820	131–135	8	6
41– 45	446	429	136–140	11	9
46– 50	349	311	141–145	1	1
51– 55	147	136	146–150	0	0
56– 60	124	113	151–155	17	16
61– 65	120	110	156–160	4	3
66– 70	34	35	161–165	4	3
71– 75	37	32	166–170	5	4
76– 80	28	29	171–175	4	4
81– 85	21	19	176–180	0	0
86– 90	8	10	181 and over	9	19
91– 95	7	8			
96–100	7	7	Total	**4,962†**	**5,261‡**

* April 1 to March 31.
† The owners of 482 boats were issued fishing party licenses in 1971–72.
‡ The owners of 465 boats were issued fishing party licenses in 1972–73.

TABLE 6

Origin of Shipments Received for Processing in California During 1972 *

Shipped from: Species	Pounds shipped to each area		
	Los Angeles	San Diego	Total pounds
Continental United States:			
Tuna, bluefin	576,088	---	576,088
Tuna, skipjack	37,500	---	37,500
Oregon, Washington, Canada and Alaska:			
Tuna, albacore	16,735,782	1,403,092	18,138,874
Tuna, yellowfin	449,320	---	449,320
Mexico and Central America:			
Tuna, albacore	82,033	---	82,033
Tuna, bluefin	543,120	51,404	594,524
Tuna, skipjack	1,512,323	365,776	1,878,099
Tuna, skipjack, black	420,279	---	420,279
Tuna, yellowfin	4,862,812	1,973,117	6,835,929
South America:			
Tuna, albacore	2,708,013	---	2,708,013
Tuna, bigeye	8,495	---	8,495
Tuna, skipjack	1,610,108	---	1,610,108
Tuna, yellowfin	1,875,376	---	1,875,376
Japan:			
Tuna, albacore	35,598,299	3,281,417	38,879,716
Tuna, bigeye	100,645	7,991	108,636
Tuna, bluefin	89,160	---	89,160
Tuna, skipjack	65,387,247	7,609,352	72,996,599
Tuna, skipjack, black	2,860	---	2,860
Tuna, yellowfin	7,925,216	1,704,405	9,629,621
Australia and New Zealand:			
Tuna, albacore	436,598	---	436,598
Tuna, bluefin	4,836,935	---	4,836,935
Tuna, skipjack	255,870	---	255,870
China (Formosa):			
Tuna, albacore	313,790	8,060	321,850
Tuna, skipjack	614,352	21,666	636,018
Tuna, yellowfin	5,386,433	303,074	5,689,507
Malaya:			
Tuna, albacore	322,392	---	322,392
Tuna, skipjack	224,105	---	224,105
Tuna, yellowfin	1,804,205	---	1,804,205
South Pacific Islands:			
Tuna, albacore	9,939,401	588,729	10,528,130
Tuna, skipjack	48,756	---	48,756
Tuna, yellowfin	5,345,167	1,727,552	7,072,719
Africa:			
Tuna, albacore	4,712,891	---	4,712,891
Tuna, bigeye	1,978	---	1,978
Tuna, skipjack	9,118,931	---	9,118,931
Tuna, skipjack, black	---	11,265	11,265
Tuna, yellowfin	1,001,361	---	1,001,361
Philippines:			
Tuna, bigeye	72,102	---	72,102
Tuna, skipjack	218,610	---	218,610
Tuna, yellowfin	2,423,529	---	2,423,529
Spain:			
Tuna, skipjack	798,958	---	798,958
Total pounds	**188,401,040**	**19,056,900**	**207,457,940**

* Beginning in 1965 only tuna shipments are recorded.

TABLE 7

Origin of Commercial Fish Landings and Volume of Shipments Into California During 1972

Species	Landings of catches from						
	California waters	Waters north of State	Waters south of State	Central Pacific waters	Total pounds	Tuna shipments*	Grand total
Fish:							
Anchovy, northern	138,201,522	----	51	----	138,201,573	----	138,201,573
Barracuda, California	13,915	----	----	----	13,915	----	13,915
Blacksmith	75,880	----	----	----	75,880	----	75,880
Bonito, Pacific	15,600,361	----	6,712,266	----	22,312,627	----	22,312,627
Cabezon	5,853	----	----	----	5,853	----	5,853
Croaker, white	373,410	----	----	----	373,410	----	373,410
Dolphinfish	1,567	----	6,217	----	7,784	----	7,784
Flounder	657,070	2,640	----	----	659,710	----	659,710
Flounder, arrowtooth	147,226	16,721	----	----	163,947	----	163,947
Flyingfish	128,889	----	----	----	128,889	----	128,889
Grenadiers	56,647	7,376	----	----	64,023	----	64,023
Hake, Pacific	10,525	----	----	----	10,525	----	10,525
Halfmoon	27,122	----	----	----	27,122	----	27,122
Halibut, California	309,003	----	242	----	309,245	----	309,245
Halibut, Pacific	235	----	----	----	235	----	235
Herring, Pacific	125,448	----	----	----	125,448	----	125,448
Lingcod	3,129,455	116,731	----	----	3,246,186	----	3,246,186
Mackerel, jack	51,116,891	----	682	----	51,117,573	----	51,117,573
Mackerel, Pacific	108,035	----	43	----	108,078	----	108,078
Mudsucker, longjaw	1,289	----	----	----	1,289	----	1,289
Opaleye	15,390	----	----	----	15,390	----	15,390
Perch	272,470	----	443	----	272,913	----	272,913
Pompano, Pacific	154,842	----	90	----	154,932	----	154,932
Queenfish	46,473	----	----	----	46,473	----	46,473
Rockfish	15,868,230	510,848	42,174	----	16,421,252	----	16,421,252
Sablefish	7,983,299	412,415	----	----	8,395,714	----	8,395,714
Salmon	6,422,171	1,118	----	----	6,423,289	----	6,423,289
Sanddab	916,680	4,142	----	----	920,822	----	920,822
Sardine, Pacific	372,230	----	----	----	372,230	----	372,230
Sargo	637	----	229	----	866	----	866
Sculpin	61,896	----	70,120	----	132,016	----	132,016
Sea bass, giant	12,329	----	82,984	----	95,313	----	95,313
Seabass, white	550,891	----	226,497	----	777,388	----	777,388
Shark	364,062	31	36,676	----	400,769	----	400,769
Sheephead, California	6,919	----	165	----	7,084	----	7,084

Skate	118,386	----	----	----	118,386	----	118,386
Smelt	514,298	----	----	----	514,298	----	514,298
Smelt, whitebait	189,358	----	----	----	189,358	----	189,358
Sole, Dover	19,054,384	3,027,313	----	----	22,081,697	----	22,081,697
Sole, English	2,915,830	86,135	----	----	3,001,965	----	3,001,965
Sole, petrale	3,493,522	81,723	----	----	3,575,245	----	3,575,245
Sole, rex	1,569,369	92,241	----	----	1,661,610	----	1,661,610
Sole, sand	384,097	5,055	----	----	389,152	----	389,152
Sole, miscellaneous	29,669	370	18	----	30,057	----	30,057
Swordfish	261,624	----	4,358	----	265,982	----	265,982
Tuna, albacore	17,573,831	1,105,210	2,313,999	8,174	21,001,214	76,130,497	97,131,711
Tuna, bigeye	----	----	191,476	----	191,476	191,211	382,687
Tuna, bluefin	1,525,962	----	23,351,759	----	24,877,721	6,096,707	30,974,428
Tuna, skipjack	41,418	----	35,903,466	----	35,944,884	87,823,554	123,768,438
Tuna, skipjack, black	27,000	----	1,082,110	----	1,109,110	434,404	1,543,514
Tuna, yellowfin	71,522	----	241,633,460	----	241,704,982	36,781,567	278,486,549
Turbot	17,463	660	----	----	18,123	----	18,123
Wahoo	----	----	1,807	----	1,807	----	1,807
Whitefish, ocean	1,469	----	1,100	----	2,569	----	2,569
Yellowtail	95,102	----	162,969	----	258,071	----	258,071
Miscellaneous	1,147	----	26	----	1,173	----	1,173
Miscellaneous (animal food)	370,053	----	----	----	370,053	----	370,053
Crustacean:							
Crab, Dungeness	1,563,006	----	----	----	1,563,006	----	1,563,006
Crab, rock	843,503	----	27	----	843,530	----	843,530
Lobster, spiny	398,217	----	----	----	398,217	----	398,217
Prawn, spot	20,970	----	----	----	20,970	----	20,970
Shrimp, ocean	2,443,027	46,843	----	----	2,489,870	----	2,489,870
Echinoderm:							
Sea urchin	76,457	----	----	----	76,457	----	76,457
Miscellaneous echinoderm	1,260	----	----	----	1,260	----	1,260
Mollusk:							
Abalone, black	1,014,892	----	----	----	1,014,892	----	1,014,892
Abalone, green	424,828	----	----	----	424,828	----	424,828
Abalone, pink	403,709	----	----	----	403,709	----	403,709
Abalone, red	1,104,462	----	----	----	1,104,462	----	1,104,462
Abalone, threaded	1,868	----	----	----	1,868	----	1,868
Abalone, white	143,819	----	----	----	143,819	----	143,819
Octopus	10,323	259	----	----	10,582	----	10,582
Oyster, eastern	9,028	----	----	----	9,028	----	9,028
Oyster, giant Pacific	876,127	----	----	----	876,127	----	876,127
Squid	20,159,312	----	----	----	20,159,312	----	20,159,312
Miscellaneous mollusk	582	----	----	----	582	----	582
Total pounds	**320,889,756**	**5,517,831**	**311,825,454**	**8,174**	**638,241,215**	**207,457,940**	**845,699,155**

* For origin of shipments refer to Table 6. Beginning in 1965 only tuna shipments are recorded.

TABLE 8

Monthly Landings and Shipments Into California During 1972

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
LANDINGS:													
Fish:													
Anchovy, northern	25,337,993	20,029,208	5,758,467	7,840,988	6,746,236	887,807	729,017	2,115,868	4,001,562	25,590,784	25,934,015	13,229,628	138,201,573
Barracuda, California	41	31	3,797	1,051	1,871	1,300	730	177	3,527	569	644	177	13,915
Blacksmith	----	----	----	----	29,440	46,440	----	----	----	----	----	----	75,880
Bonito, Pacific	552,087	252,518	121,721	351,343	775,904	1,530,984	342,145	2,252,809	7,118,096	5,500,760	2,062,290	1,451,970	22,312,627
Cabezon	750	8	268	670	393	----	92	214	428	426	2,469	135	5,853
Croaker, white	75,539	37,512	37,522	67,390	40,845	24,529	13,143	20,505	7,514	12,817	14,481	21,613	373,410
Dolphinfish	1,664	3,372	----	1,804	85	----	----	69	288	258	244	----	7,784
Flounder	21,788	45,983	85,546	24,734	28,642	14,745	31,311	30,327	138,218	116,335	70,351	51,730	659,710
Flounder, arrowtooth	4,941	1,467	9,131	9,165	15,047	3,980	8,934	26,123	29,021	27,837	13,508	14,793	163,947
Flyingfish	----	----	----	----	24,543	40,088	51,463	12,795	----	----	----	----	128,889
Grenadiers	----	----	----	----	----	----	4,152	39,680	7,230	8,264	4,259	438	64,023
Hake, Pacific	----	----	50	4,190	2,390	150	210	3,000	----	535	----	----	10,529
Halfmoon	1,985	714	1,299	3,551	3,919	6,922	1,149	2,126	980	1,567	1,833	1,077	27,122
Halibut, California	18,916	56,026	18,496	9,143	19,231	30,972	47,886	49,510	17,819	19,503	15,049	6,694	309,245
Halibut, Pacific	----	----	----	----	28	86	34	87	----	----	----	----	235
Herring, Pacific	12,000	9,700	----	13,900	81,332	8,000	----	213	----	----	195	108	125,448
Lingcod	69,123	89,662	125,061	142,014	357,288	439,171	500,753	538,549	427,439	309,177	111,791	136,158	3,246,186
Mackerel, jack	5,692,755	3,530,389	4,805,018	651,165	542,656	1,724,182	7,000,259	9,915,802	13,429,289	648,127	2,182,506	995,425	51,117,573
Mackerel, Pacific	2,390	27,486	6,670	11,565	1,254	937	260	140	448	16,222	32,134	8,572	108,078
Mudsucker, longjaw	71	45	85	122	175	72	135	150	105	160	90	79	1,289
Opaleye	121	----	187	285	2,495	3,649	2,260	2,320	715	900	510	1,948	15,390
Perch	10,984	11,517	27,340	27,801	11,517	110,165	11,928	26,788	15,068	8,336	3,530	7,939	272,913
Pompano, Pacific	83,560	4,738	9,649	19,642	6,698	2,197	735	1,511	2,523	4,166	3,929	15,584	154,932
Queenfish	7,300	10,000	17,970	4,200	3,500	----	253	----	----	250	3,000	----	46,473
Rockfish	936,022	1,361,640	1,491,181	1,044,917	1,265,067	1,369,004	1,285,645	1,445,419	1,207,810	1,843,431	1,608,773	1,562,343	16,421,252
Sablefish	809,946	1,036,248	743,883	400,796	566,441	523,893	638,581	695,795	684,001	1,002,457	628,474	665,199	8,395,714
Salmon	----	----	----	3,044	1,811,359	1,902,685	1,645,556	841,603	218,166	876	----	----	6,423,289
Sanddab	50,268	81,716	79,885	52,207	78,196	118,539	123,211	148,997	82,271	62,998	21,479	21,055	920,822
Sardine, Pacific	----	17,657	6,795	9,385	10,681	42,935	135,791	9,430	35,808	18,959	32,306	52,483	372,230
Sargo	----	----	100	229	----	207	220	110	----	----	----	----	866
Sculpin	1,424	1,726	739	2,192	2,817	41,001	33,395	28,561	3,297	4,568	6,306	5,990	132,016
Sea bass, giant	4,281	22,805	9,205	2,175	2,302	2,347	2,091	725	18,830	22,086	1,305	7,161	95,313
Seabass, white	58,648	96,784	88,692	29,920	25,752	26,066	19,767	191,132	95,723	51,450	38,218	55,236	777,388
Shark	35,021	25,123	10,454	10,392	23,243	37,566	44,789	43,663	36,855	51,840	48,792	33,031	400,769
Sheephead, California	1,136	1,038	461	483	686	1,900	110	29	188	663	89	301	7,084
Skate	4,184	14,234	11,115	12,809	22,384	9,225	10,781	13,767	8,395	3,310	2,520	5,662	118,386
Smelt	44,731	2,016	4,676	9,153	25,166	44,675	143,393	167,553	25,893	30,161	6,940	9,941	514,298
Smelt, whitebait	624	3,114	16,916	19,827	45,898	51,713	42,215	8,728	323	----	----	----	189,358
Sole, Dover	576,534	1,539,593	1,765,840	1,626,690	2,534,123	2,355,441	2,622,923	2,601,776	2,501,117	2,058,125	1,026,042	873,493	22,081,697
Sole, English	258,721	313,693	237,105	158,087	214,617	195,874	218,784	375,875	410,087	312,492	141,660	164,070	2,001,065

Sole, rex	196,000	153,250	105,000										
Sole, sand	26,255	35,588	52,713	8,857	54,684	19,907	21,687	23,132	55,407	57,200	22,298	11,424	389,152
Sole, miscellaneous	2,484	7,309	6,363	867	1,633	573	1,350	2,712	270	764	459	5,273	30,057
Swordfish	----	----	120	2,256	3,162	2,857	52,331	104,018	69,232	31,602	164	240	265,982
Tuna, albacore	----	1,970	----	----	15	51,307	4,475,119	3,667,340	6,372,491	5,767,000	662,723	3,249	21,001,214
Tuna, bigeye	----	158,215	----	----	29,010	----	----	----	----	4,251	----	----	191,476
Tuna, bluefin	----	7,420	----	----	----	3,722,760	2,442,663	8,577,205	4,663,403	4,473,885	990,385	----	24,877,721
Tuna, skipjack	168,003	1,698,199	2,571,608	2,256,237	5,839,753	4,224,860	6,580,795	3,372,072	666,494	438,398	2,123,698	6,004,767	35,944,884
Tuna, skipjack, black	----	----	35,900	----	611,498	426,722	7,630	----	27,000	----	360	----	1,109,110
Tuna, yellowfin	3,573,131	29,491,401	32,941,205	39,003,659	37,490,662	25,165,560	19,569,892	14,059,039	11,610,489	17,043,613	8,976,222	2,780,109	241,704,982
Turbot	342	3,913	3,527	311	125	2,792	734	2,060	2,188	907	620	604	18,123
Wahoo	----	----	465	475	----	450	----	----	171	246	----	----	1,807
Whitefish, ocean	70	278	172	240	----	268	485	188	----	320	80	468	2,569
Yellowtail	7,102	24,730	11,100	5,101	6,875	12,983	4,420	1,933	40,232	23,986	55,850	63,759	258,071
Miscellaneous	----	185	26	170	28	244	16	361	52	81	----	10	1,173
Miscellaneous (animal food)	38,825	62,160	20,820	20,140	50,113	20,025	36,380	30,080	15,975	34,050	20,150	21,335	370,053
Crustacean:													
Crab, Dungeness	286,653	138,388	105,108	47,267	107,223	72,038	21,548	23,060	----	----	152,876	608,845	1,563,006
Crab, rock	62,601	78,719	63,629	60,435	52,323	64,378	83,191	85,043	70,949	91,113	60,416	70,733	843,530
Lobster, spiny	45,400	50,899	31,891	----	----	----	----	----	----	116,411	99,894	53,722	398,217
Prawn, spot	2,143	1,936	1,638	----	----	----	----	----	----	4,598	5,449	5,206	20,970
Shrimp, ocean	----	----	----	90,675	320,561	256,846	531,547	627,880	307,987	354,374	----	----	2,489,870
Echinoderm:													
Sea urchin	1,728	4,868	----	4,700	43,242	----	----	----	----	382	1,881	19,656	76,457
Miscellaneous echinoderm	----	376	----	228	217	----	----	439	----	----	----	----	1,260
Mollusk:													
Abalone, black	13,934	1,325	16,049	109,473	179,820	346,216	69,171	787	64,695	21,341	26,566	165,515	1,014,892
Abalone, green	74,365	375	17,243	32,562	71,731	51,977	51,585	689	35,994	21,529	24,413	42,365	424,828
Abalone, pink	34,333	162	54,687	70,215	29,347	22,570	31,425	1,037	42,670	38,685	51,876	26,702	403,709
Abalone, red	137,573	5,560	100,159	108,409	90,888	67,284	121,649	1,668	136,605	142,260	73,986	118,421	1,104,462
Abalone, threaded	6	----	----	54	46	4	410	----	316	402	471	159	1,868
Abalone, white	25,470	----	10,883	9,832	7,129	7,728	8,590	991	7,731	23,691	27,156	14,618	143,819
Octopus	245	609	749	362	563	317	788	1,274	1,452	2,231	633	1,359	10,582
Oyster, eastern	1,065	1,189	463	1,135	826	1,150	559	235	1,344	864	110	88	9,028
Oyster, giant Pacific	95,610	92,827	97,196	71,993	72,650	57,437	58,109	14,281	75,045	85,957	82,841	72,181	876,127
Squid	123,750	1,996,785	814,712	2,308,775	4,359,015	7,507,660	1,986,875	592,925	107,125	61,450	92,760	207,480	20,159,312
Miscellaneous mollusk	120	145	250	20	20	----	----	----	----	27	----	----	582
Total pounds	40,274,971	63,004,461	52,851,563	57,185,573	65,305,658	54,067,841	52,221,500	53,267,105	55,336,545	66,968,428	47,770,897	29,986,673	638,241,215
SHIPMENTS:													
Fish:													
Tuna, albacore	2,531,589	1,255,169	5,341,488	4,119,566	3,372,750	2,830,942	15,042,416	18,266,211	7,647,392	4,243,408	8,024,452	3,455,114	76,130,497
Tuna, bigeye	8,495	----	1,978	----	7,991	----	62,252	4,924	4,926	23,620	----	77,025	191,211
Tuna, bluefin	----	----	----	4,114,139	69,985	101,062	562,029	898,305	351,187	----	----	----	6,096,707
Tuna, skipjack	6,937,520	3,130,792	13,453,244	9,757,889	10,014,379	7,171,753	6,179,135	9,013,308	4,877,324	7,355,553	4,054,887	5,877,770	87,823,554
Tuna, skipjack, black	----	----	----	----	62,355	120,240	25,008	1,410	1,450	170,846	41,830	11,265	434,404
Tuna, yellowfin	2,351,618	1,008,212	4,150,161	3,895,669	4,891,249	2,760,392	3,391,841	1,816,516	3,719,371	1,983,812	2,657,223	4,155,503	36,781,567
Total pounds	11,829,222	5,394,173	22,946,871	21,887,263	18,418,709	12,984,389	25,262,681	30,000,674	16,601,650	13,777,239	14,778,392	13,576,677	207,457,940
Grand total	**52,104,193**	**68,398,634**	**75,798,434**	**79,072,836**	**83,724,367**	**67,052,230**	**77,484,181**	**83,267,779**	**71,938,195**	**80,745,667**	**62,549,289**	**43,563,350**	**845,699,155**

• For origin of shipments refer to Table 6. Beginning in 1965 only tuna shipments are recorded.

TABLE 9

Monthly Landings of Commercial Fishing Boats in the Eureka Area During 1972

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
LANDINGS FROM:													
California waters:													
Fish:													
Bonito, Pacific	----	----	----	----	----	----	----	----	----	544	----	106	650
Cabezon	----	----	----	289	147	----	28	----	----	----	12	----	476
Flounder	2,499	3,494	23,774	11,597	23,092	10,128	6,822	12,378	29,635	58,202	61,317	43,613	286,551
Flounder, arrowtooth	2,606	1,467	8,276	9,165	13,220	3,980	8,084	26,123	29,021	22,468	12,748	2,238	139,396
Grenadiers	----	----	----	----	----	----	4,152	39,680	1,914	7,844	3,057	----	56,647
Halibut, California	----	----	----	----	----	----	40	----	----	----	----	----	40
Halibut, Pacific	----	----	----	----	28	86	12	87	----	----	----	----	213
Lingcod	26,009	27,712	59,143	75,445	158,916	304,548	369,123	399,016	324,666	150,531	26,671	23,842	1,945,622
Mackerel, jack	----	----	----	----	----	----	----	385	1,522	835	----	----	2,742
Perch	3,751	3,385	11,987	10,551	75	22	7,984	17,936	9,346	2,784	218	965	69,004
Rockfish	386,595	507,842	594,162	301,720	459,709	490,146	646,332	656,408	496,032	619,136	576,652	291,594	6,026,328
Sablefish	488,767	594,262	391,838	253,658	406,807	375,199	488,103	510,630	441,780	514,089	222,961	303,133	4,991,227
Salmon	----	----	----	114	972,342	1,029,951	1,098,551	236,481	30,587	12	----	----	3,368,038
Sanddab	32,220	50,719	41,753	18,053	48,162	61,770	79,719	87,667	55,039	30,140	10,381	5,348	520,971
Shark	850	612	451	476	1,540	483	144	95	184	5,958	3,265	1,988	16,046
Skate	----	2,600	2,600	5,940	14,849	5,370	6,550	1,288	5,700	400	----	2,705	48,002
Smelt	----	108	50	242	9,781	26,353	108,457	144,798	16,741	216	----	----	306,746
Smelt, whitebait	296	2,646	14,513	14,688	35,481	47,763	41,207	8,242	323	----	----	----	165,159
Sole, Dover	402,919	541,186	996,024	1,233,119	2,051,524	2,061,494	2,122,408	1,741,850	1,590,923	1,427,810	673,030	515,176	15,357,463
Sole, English	64,863	129,512	130,038	97,764	147,550	112,651	105,771	170,028	230,070	133,210	23,900	22,966	1,368,323
Sole, petrale	427,468	130,302	91,701	42,012	111,417	107,581	91,351	96,543	94,287	116,786	44,008	111,321	1,464,777
Sole, rex	117,403	121,844	119,722	95,682	154,133	99,813	114,812	133,424	126,970	84,027	34,418	39,696	1,241,944
Sole, sand	11,735	17,761	27,109	5,499	49,532	7,342	2,536	5,166	20,271	18,222	11,963	10,024	187,160
Sole, miscellaneous	516	----	1,545	177	836	----	----	25	----	----	----	4,333	7,432
Tuna, albacore	----	----	----	----	----	100	285,633	419,168	202,779	25,469	975	1,908	936,032
Turbot	342	2,207	1,837	303	15	77	----	270	173	302	180	43	5,749
Miscellaneous	----	----	----	170	----	----	----	----	16	----	----	----	186
Crustacean:													
Crab, Dungeness	251,413	99,727	79,507	36,664	96,357	54,472	21,548	23,060	----	----	----	543,761	1,206,509
Crab, rock	----	----	----	20	----	290	550	180	----	----	----	----	1,040
Shrimp, ocean	----	----	----	56,782	220,324	249,126	531,547	528,674	285,456	350,796	----	----	2,222,705

Mollusk:													
Octopus	66	153	157	124	221	136	483	829	929	1,332	150	394	4,974
Oyster, giant Pacific	86,192	84,906	92,119	67,938	68,295	54,090	47,037	----	64,098	70,867	61,932	54,358	751,832
Miscellaneous mollusk	120	65	----	----	----	----	----	----	----	----	----	----	185
Total pounds	2,306,630	2,322,510	2,688,306	2,338,192	5,044,353	5,102,971	6,188,984	5,260,431	4,058,462	3,641,980	1,767,838	1,979,512	42,700,169
Waters north of State:													
Fish:													
Flounder	----	119	502	531	367	----	392	425	292	12	----	----	2,640
Flounder, arrowtooth	----	----	525	----	1,827	----	----	----	----	5,369	----	9,000	16,721
Grenadiers	----	----	----	----	----	----	----	----	5,316	420	1,202	438	7,376
Lingcod	120	1,907	2,264	11,707	20,819	12,842	19,168	23,421	21,922	1,993	407	161	116,731
Rockfish	13,597	8,317	23,289	36,306	26,259	16,833	37,194	93,846	137,595	70,042	25,835	21,735	510,848
Sablefish	7,551	1,113	14,606	30,346	32,166	14,811	38,462	72,335	88,960	65,577	27,242	19,246	412,415
Salmon	----	----	----	----	65	81	859	36	77	----	----	----	1,118
Sanddab	----	573	173	480	514	----	115	1,809	478	----	----	----	4,142
Shark	----	----	----	----	----	----	----	----	----	31	----	----	31
Sole, Dover	40,092	742	32,012	183,026	174,440	101,231	300,380	619,207	709,670	494,678	239,051	132,784	3,027,313
Sole, English	----	22,763	1,845	4,073	6,113	1,537	8,661	8,178	30,320	2,645	----	----	86,135
Sole, petrale	3,346	7,400	5,115	4,008	9,136	1,543	7,032	7,521	22,665	3,527	1,306	9,124	81,723
Sole, rex	2,459	2,521	6,942	6,881	15,050	4,865	8,399	11,728	14,107	10,076	4,866	4,347	92,241
Sole, sand	----	1,567	1,109	223	745	----	181	627	----	603	----	----	5,055
Sole, miscellaneous	----	----	238	----	132	----	----	----	----	----	----	----	370
Turbot	----	446	----	----	----	----	214	----	----	----	----	----	660
Crustacean:													
Shrimp, ocean	----	----	----	3,614	9,440	----	----	7,680	22,531	3,578	----	----	46,843
Mollusk:													
Octopus	----	----	----	----	----	----	----	88	123	48	----	----	259
Total pounds	67,165	47,468	88,620	281,195	297,073	153,743	421,057	846,901	1,054,056	658,599	299,909	196,835	4,412,621
Grand total	**2,373,795**	**2,369,978**	**2,776,926**	**2,619,387**	**5,341,426**	**5,256,714**	**6,610,041**	**6,107,332**	**5,112,518**	**4,300,579**	**2,067,747**	**2,176,347**	**47,112,790**

TABLE 10

Monthly Landings of Commercial Fishing Boats in the San Francisco Area During 1972

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
LANDINGS FROM:													
California waters:													
Fish:													
Anchovy, northern	5,800	4,790	----	36,880	61,810	45,750	33,220	58,117	78,790	35,570	----	----	360,727
Bonito, Pacific	----	----	----	----	----	----	----	----	1,036	4,442	----	----	5,478
Cabezon	255	----	85	359	246	----	----	22	12	----	----	----	979
Croaker, white	445	140	130	50	1,093	3,747	3,087	3,611	2,186	3,489	1,274	974	20,226
Flounder	13,060	36,968	50,691	8,845	4,110	3,165	20,983	12,033	97,313	56,364	6,906	800	311,238
Flounder, arrowtooth	2,335	----	330	----	----	----	850	----	----	----	760	3,555	7,830
Hake, Pacific	----	----	----	4,190	2,100	----	----	3,000	----	----	----	----	9,290
Halibut, California	12,320	35,760	6,179	483	159	379	14,110	9,100	6,595	12,346	8,370	1,361	107,162
Halibut, Pacific	----	----	----	----	----	----	22	----	----	----	----	----	22
Herring, Pacific	12,000	9,700	----	----	----	----	----	----	----	----	----	108	21,808
Lingcod	13,994	18,078	18,574	19,563	110,467	21,521	56,125	64,387	12,926	22,766	13,269	22,025	393,695
Mackerel, jack	----	----	----	----	----	5	1,005	265	115	----	----	----	1,390
Mudsucker, longjaw	71	45	85	122	175	72	135	150	103	160	90	79	1,287
Perch	5,960	3,641	7,580	8,037	----	----	911	1,934	2,027	1,238	1,470	2,555	35,353
Pompano, Pacific	----	----	----	----	----	148	484	----	----	70	----	----	702
Rockfish	89,221	204,739	173,293	91,091	113,426	69,627	58,384	104,191	82,684	141,477	154,865	338,712	1,621,710
Sablefish	84,077	182,555	138,771	83,563	70,137	57,545	57,205	64,890	70,888	170,859	76,815	137,599	1,194,904
Salmon	----	----	----	125	564,911	707,209	503,015	580,001	148,129	14	----	----	2,503,404
Sanddab	8,663	12,065	27,300	14,875	17,055	37,500	22,180	31,452	18,290	25,030	8,531	4,529	227,470
Seabass, white	----	35	----	----	----	----	----	----	53	318	43	42	491
Shark	7,434	4,390	280	50	250	160	14,203	6,567	8,610	21,613	10,297	4,957	78,811
Skate	1,405	1,800	1,400	300	----	----	----	----	----	400	240	389	5,934
Smelt	475	816	3,146	2,633	5,155	8,314	3,618	697	2,281	300	----	----	27,435
Smelt, whitebait	328	468	2,403	5,139	10,417	3,950	1,008	486	----	----	----	----	24,199
Sole, Dover	132,568	988,990	726,541	185,115	269,839	168,546	185,655	226,759	196,519	133,372	113,136	224,653	3,551,693
Sole, English	125,935	87,639	51,817	18,898	32,915	53,937	81,054	120,748	103,585	120,558	55,643	76,393	929,122
Sole, petrale	254,521	141,584	52,230	122,824	166,485	65,924	83,686	103,395	59,912	25,575	42,685	39,615	1,158,436
Sole, rex	32,898	36,264	22,752	9,300	3,114	7,590	7,695	8,794	11,870	12,095	12,634	37,135	202,141
Sole, sand	8,420	5,960	18,130	2,645	825	8,880	16,830	16,599	33,766	38,165	9,440	1,355	161,015
Sole, miscellaneous	----	----	----	290	----	8	4	85	----	----	----	526	913

Swordfish	----	----	----	----	----	----	----	----	245	----	----	----	245
Tuna, albacore	----	----	----	----	----	----	195,519	393,785	1,720,068	886,964	11,364	----	3,207,700
Turbot	----	1,260	1,690	----	----	----	450	1,790	2,015	605	440	561	8,811
Miscellaneous	----	----	----	----	----	----	----	165	2	----	----	----	167
Crustacean:													
Crab, Dungeness	35,035	38,158	24,085	4,296	6,239	16,429	----	----	----	----	151,829	59,324	335,395
Shrimp, ocean	----	----	----	30,279	90,797	7,720	----	91,526	----	----	----	----	220,322
Echinoderm:													
Sea urchin	----	20	----	----	----	----	----	----	----	----	----	----	20
Miscellaneous echinoderm	----	376	----	228	217	----	----	439	----	----	----	----	1,260
Mollusk:													
Abalone, red	2,148	----	2,418	1,683	3,397	3,265	6,511	----	4,776	1,991	4,342	2,567	33,098
Octopus	35	----	85	103	220	125	280	195	400	628	433	593	3,097
Oyster, eastern	1,065	1,189	463	1,135	826	1,150	559	235	1,344	864	110	88	9,028
Oyster, giant Pacific	3,669	3,767	3,881	4,029	4,343	3,341	11,069	14,272	10,941	12,207	12,340	11,696	95,555
Miscellaneous mollusk	----	20	----	20	20	----	----	----	----	----	----	----	60
Total pounds	854,137	1,821,217	1,334,339	657,150	1,540,748	1,296,007	1,379,857	1,919,690	2,677,481	1,729,480	697,326	972,191	16,879,623
Waters north of state:													
Fish:													
Tuna, albacore	----	----	----	----	----	----	----	----	191,086	----	----	----	191,086
Total pounds	----	----	----	----	----	----	----	----	191,086	----	----	----	191,086
Grand total	**854,137**	**1,821,217**	**1,334,339**	**657,150**	**1,540,748**	**1,296,007**	**1,379,857**	**1,919,690**	**2,868,567**	**1,729,480**	**697,326**	**972,191**	**17,070,709**

TABLE 11

Monthly Landings of Commercial Fishing Boats in the Monterey Area During 1972

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
LANDINGS FROM:													
California waters:													
Fish:													
Anchovy, northern	----	----	----	50	----	----	----	61,905	123,800	295,310	643,033	64,000	1,188,098
Bonito, Pacific	----	----	----	----	----	----	----	12	28,981	17,739	1,089	----	47,821
Cabezon	495	----	158	22	----	----	64	88	366	----	1,025	33	2,251
Croaker, white	1,996	2,218	1,739	48,660	32,189	8,375	7,603	11,046	4,138	6,682	11,197	10,304	146,147
Flounder	6,229	4,845	5,746	1,126	873	1,422	2,944	5,447	10,940	1,751	2,123	7,123	50,569
Halibut, California	171	4,715	740	2,596	822	2,014	12,943	21,659	2,122	292	423	1,059	49,556
Herring, Pacific	----	----	----	13,900	81,332	8,000	----	213	----	----	195	----	103,640
Lingcod	13,099	14,323	16,286	4,717	16,022	17,349	12,936	6,829	18,526	39,116	45,162	68,834	273,199
Mackerel, jack	----	----	2,550	5,005	10,221	----	11,850	27,470	11,130	5,030	36,720	14,270	124,246
Perch	28	343	1,829	2,342	----	----	12	265	5	----	----	404	5,228
Pompano, Pacific	----	----	4	----	40	874	76	1,250	2,105	147	----	334	4,830
Rockfish	223,848	226,319	268,303	194,459	240,825	362,723	200,150	224,668	220,139	563,485	447,264	505,399	3,677,582
Sablefish	229,551	258,036	198,359	31,855	53,446	73,300	53,174	46,845	82,373	251,789	300,784	205,221	1,784,733
Salmon	----	----	----	1,730	231,631	114,386	16,841	23,866	31,360	850	----	----	420,664
Sanddab	9,229	18,013	10,492	18,752	12,465	19,269	21,097	27,973	8,244	7,828	2,567	11,162	167,091
Seabass, white	----	----	----	16	----	----	85	1,320	1,620	4,670	214	124	8,049
Shark	2,836	1,633	528	153	310	1,642	5,550	4,750	2,167	10,104	6,637	3,563	39,873
Skate	2,492	9,785	7,115	6,569	7,535	3,700	3,911	12,479	2,510	2,510	2,280	2,568	63,454
Smelt	2,506	922	1,078	4,230	5,370	1,388	269	1,673	581	235	115	----	18,367
Sole, Dover	925	8,675	5,605	3,850	7,585	6,960	4,460	6,875	3,855	1,205	540	880	51,415
Sole, English	9,435	35,800	29,014	24,666	16,864	14,275	17,155	53,068	25,295	31,932	25,766	26,755	310,025
Sole, petrale	11,755	22,705	24,460	20,694	20,753	14,150	13,085	37,504	39,910	71,135	34,620	27,240	338,011
Sole, rex	9,360	20,480	6,415	1,055	800	1,585	375	1,940	1,790	1,565	1,780	4,970	52,115
Sole, sand	----	1,435	1,725	170	485	40	905	740	1,370	210	60	45	7,185
Sole, miscellaneous	----	198	130	15	361	163	1,199	2,093	63	728	83	225	5,258
Tuna, albacore	----	----	----	----	15	----	658,289	1,173,340	2,051,606	522,148	47,275	----	4,452,673
Miscellaneous	----	----	----	----	----	96	----	----	----	----	----	10	106

Crustacean:												
Crab, Dungeness	113	128	----	----	----	----	----	----	----	----	46	287
Crab, rock	130	69	----	----	----	----	----	----	----	----	----	199
Prawn, spot	2,143	1,936	1,638	----	----	----	----	----	4,698	5,449	5,206	20,970
Mollusk:												
Abalone, red	----	----	----	----	----	150	----	----	----	----	----	150
Octopus	144	433	507	----	----	----	----	----	68	50	329	1,531
Squid	----	----	9,925	106,875	3,706,763	6,327,100	1,768,775	121,025	61,450	45,660	3,580	12,258,278
Miscellaneous mollusk	----	60	250	----	----	----	----	----	----	----	----	310
	526,485	633,071	594,596	493,507	4,446,707	6,978,811	2,813,898	1,876,343	2,782,121	1,902,577	1,662,111	963,684	25,673,911
Grand total												

TABLE 12
Monthly Landings of Commercial Fishing Boats in the Santa Barbara Area During 1972

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
LANDINGS FROM:													
California waters:													
Fish:													
Anchovy, northern	5,294,675	4,077,250	1,170,900	127,200	1,143,500	36,400	47,200	1,703,000	3,528,500	5,040,300	2,969,450	2,338,600	27,476,975
Barracuda, California	----	3	30	----	18	241	----	----	----	----	411	177	880
Bonito, Pacific	26,816	41	----	545	34	21	628	220	1,108,993	683,657	539,737	275,457	2,636,149
Cabezon	----	----	25	----	----	----	----	104	----	426	1,432	102	2,089
Croaker, white	1,925	20	----	----	----	----	----	500	----	----	----	----	2,445
Flounder	----	557	4,833	2,635	200	----	----	----	38	6	5	168	8,442
Hake, Pacific	----	----	50	----	290	----	----	----	----	535	----	----	875
Halibut, California	4,490	9,328	8,194	2,009	3,389	16,240	13,338	12,295	5,034	5,343	5,595	3,799	89,054
Lingcod	15,832	27,547	28,778	30,527	51,064	82,826	43,388	44,781	49,399	94,665	26,141	20,651	515,599
Mackerel, jack	----	366,900	266,600	----	----	----	25,420	33,008	24,888	----	55,100	----	771,916
Perch	1,151	1,184	1,008	3,055	35	----	1,074	1,420	1,005	2,271	1,003	1,393	14,599
Pompano, Pacific	110	----	215	----	----	20	----	----	----	----	----	2,000	2,345
Rockfish	97,254	216,844	301,331	296,382	301,682	331,981	299,464	305,021	211,531	354,379	315,972	259,382	3,291,223
Sablefish	----	----	225	1,215	3,737	2,725	1,425	965	----	25	630	----	10,947
Salmon	----	----	----	1,075	42,410	51,058	26,271	1,197	8,013	----	----	----	130,024
Sanddab	96	280	127	----	----	----	14	----	----	----	----	----	517
Sea bass, giant	49	----	----	----	----	166	295	284	----	----	14	----	808
Seabass, white	4,423	517	2,159	1,266	2,945	4,119	4,510	10,056	21,483	9,834	13,273	2,610	77,195
Shark	6,153	3,008	3,655	4,082	9,047	11,606	9,535	6,701	2,584	5,318	9,862	3,122	74,673
Sheephead, California	97	----	16	----	----	10	----	12	----	16	13	----	164
Skate	287	40	----	----	----	----	----	----	125	----	----	----	452
Smelt	41,750	----	----	----	----	----	----	----	----	----	----	----	41,750
Sole, Dover	30	----	5,658	21,580	30,735	16,525	9,685	7,085	150	1,060	285	----	92,793
Sole, English	58,488	37,979	24,391	12,686	11,175	12,249	6,015	23,853	20,817	24,138	36,360	38,856	307,007
Sole, petrale	14,465	23,205	60,065	85,835	60,100	55,631	20,525	62,796	57,140	68,100	15,237	7,982	531,181
Sole, rex	4,540	4,800	7,867	15,715	17,137	2,449	1,395	1,085	3,425	3,520	5,165	6,022	73,120
Sole, sand	6,100	8,865	4,640	320	3,097	3,645	1,235	----	----	----	835	----	28,737
Sole, miscellaneous	1,918	6,979	4,328	326	187	----	59	12	60	12	172	171	14,224
Swordfish	----	----	----	----	----	----	10,248	17,788	6,284	----	----	----	34,320
Tuna, albacore	----	----	----	----	----	1,119	1,890,489	701,068	542,638	746,260	46,826	----	3,928,400
Turbot	----	----	----	8	----	2,465	70	----	----	----	----	----	2,543
Yellowtail	----	----	----	----	----	----	----	----	267	----	----	----	267
Miscellaneous	----	185	----	----	----	----	2	----	----	----	----	----	187
Miscellaneous (animal food)	38,825	62,160	20,820	20,140	50,113	20,025	36,380	30,080	15,975	34,050	20,150	21,335	370,053

Crustacean:													
Crab, Dungeness	92	375	1,516	6,307	4,627	1,137	----	----	----	----	1,047	5,714	20,815
Crab, rock	16,695	30,536	22,247	12,528	9,133	11,867	15,657	17,288	12,562	11,606	13,831	17,144	191,094
Lobster, spiny	14,533	13,359	8,089	----	----	----	----	----	----	16,487	23,946	10,894	87,308
Echinoderm:													
Sea urchin	----	2,490	----	4,700	43,242	----	----	----	----	382	1,881	19,656	72,351
Mollusk:													
Abalone, black	13,544	----	15,850	95,620	145,548	284,228	56,506	450	54,496	18,569	23,092	144,712	852,615
Abalone, green	12	----	----	----	----	587	----	----	1,066	213	680	670	3,228
Abalone, pink	10,708	----	22,114	12,320	7,743	6,909	15,902	458	18,292	11,080	24,149	8,925	138,600
Abalone, red	119,785	5,560	84,405	96,806	71,005	56,582	94,830	1,668	113,995	129,063	61,549	108,871	944,119
Abalone, threaded	6	----	----	54	46	----	351	----	287	257	187	----	1,188
Abalone, white	----	----	----	12	----	----	----	----	----	128	15	----	155
Octopus	----	----	----	----	122	56	25	162	----	153	----	----	518
Oyster, giant Pacific	5,736	4,128	1,170	----	----	----	----	----	----	2,880	8,557	6,115	28,586
Squid	----	516,835	225,150	1,767,750	338,940	434,360	----	361,400	----	----	----	----	3,644,435
Total pounds	5,800,585	5,420,975	2,296,456	2,622,698	2,351,301	1,447,247	2,631,936	3,344,757	5,809,047	7,264,733	4,222,702	3,304,528	46,516,965
Waters south of State:													
Fish:													
Bonito, Pacific	----	1,000	----	----	----	----	----	----	----	----	----	----	1,000
Dolphinfish	----	339	----	----	----	----	----	----	----	----	----	----	339
Total pounds	----	1,339	----	----	----	----	----	----	----	----	----	----	1,339
Grand total	**5,800,585**	**5,422,314**	**2,296,456**	**2,622,698**	**2,351,301**	**1,447,247**	**2,631,936**	**3,344,757**	**5,809,047**	**7,264,733**	**4,222,702**	**3,304,528**	**46,518,304**

TABLE 13

Monthly Landings and Shipments of Commercial Fish Into the Los Angeles Area During 1972

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
LANDINGS FROM:													
California waters:													
Fish:													
Anchovy, northern	20,037,518	15,947,168	4,587,538	7,676,738	5,539,932	805,657	648,569	292,682	270,472	20,219,604	22,321,532	10,827,028	109,174,438
Barracuda, California	----	----	3,475	793	916	629	6	80	3,454	18	30	----	9,401
Blacksmith	----	----	----	----	29,440	46,440	----	----	----	----	----	----	75,880
Bonito, Pacific	240,444	38,790	127	3,345	77	201	46,875	47,385	5,820,151	4,064,754	1,386,531	1,131,265	12,779,945
Croaker, white	71,173	34,508	35,611	18,680	7,378	12,362	2,453	5,210	1,190	2,116	2,010	10,335	203,026
Dolphinfish	----	----	----	----	----	----	----	----	150	----	----	----	150
Flounder	----	----	----	----	----	----	35	----	----	----	----	----	35
Flyingfish	----	----	----	----	24,543	40,088	51,463	12,795	----	----	----	----	128,889
Hake, Pacific	----	----	----	----	----	150	210	----	----	----	----	----	360
Halfmoon	----	----	196	395	1,096	2,737	----	1,000	----	----	490	----	5,914
Halibut, California	327	3,130	1,876	2,833	10,822	10,190	4,955	5,909	43	----	6	73	40,164
Lingcod	69	13	16	----	----	85	13	95	----	6	141	645	1,083
Mackerel, jack	5,692,755	3,163,457	4,535,840	646,160	532,435	1,724,177	6,961,984	9,854,614	13,391,527	641,687	2,090,410	981,155	50,216,201
Mackerel, Pacific	2,000	27,486	6,670	10,670	984	787	----	----	190	16,005	32,134	8,540	105,466
Mudsucker, longjaw	----	----	----	----	----	----	----	----	2	----	----	----	2
Opaleye	----	----	----	285	2,495	3,649	2,260	2,320	715	900	510	1,948	15,082
Perch	90	224	2,191	2,551	7,677	109,546	93	385	395	435	180	1,163	124,930
Pompano, Pacific	83,450	4,738	9,430	19,642	6,658	1,155	95	261	418	3,859	3,929	13,250	146,885
Queenfish	7,300	10,000	17,970	4,200	3,500	----	253	----	----	250	3,000	----	46,473
Rockfish	62,485	98,480	62,774	50,291	39,185	57,026	10,508	26,648	30,770	56,603	59,784	109,071	663,625
Sablefish	----	----	84	159	148	313	212	130	----	118	42	----	1,206
Sanddab	60	----	----	----	----	----	----	79	220	----	----	----	359
Sardine, Pacific	----	14,757	3,245	8,868	3,060	42,935	135,791	9,430	20,075	12,759	22,906	52,483	326,309
Sargo	----	----	100	----	----	207	220	110	----	----	----	----	637
Sculpin	12	----	----	987	235	843	1,023	89	431	388	613	574	5,195
Sea bass, giant	----	----	242	662	889	1,156	1,509	36	----	43	----	3,938	8,475
Seabass, white	182	194	299	3,963	11,244	10,878	7,299	131,201	52,579	9,833	4,564	11,235	243,471
Shark	2,353	1,949	4,122	3,921	6,927	9,461	3,608	15,033	6,844	4,283	5,175	11,071	74,747
Sheephead, California	907	972	445	392	194	1,768	40	----	----	14	20	125	4,877
Skate	----	9	----	----	----	155	320	----	60	----	----	----	544

Smelt	----	170	402	2,048	4,860	8,620	31,030	20,355	6,290	29,410	6,825	9,791	119,801
Sole, Dover	----	----	----	----	----	685	335	----	----	----	----	----	1,020
Sole, English	----	----	----	----	----	1,225	128	----	----	----	----	----	1,353
Sole, petrale	----	----	----	----	153	350	60	----	----	----	----	----	563
Sole, rex	----	14	----	----	----	----	35	----	----	----	----	----	49
Sole, miscellaneous	----	----	----	----	----	41	49	479	33	9	----	----	611
Swordfish	----	----	----	----	1,067	1,980	14,856	33,665	39,802	30,785	164	240	122,559
Tuna, albacore	----	----	----	----	----	535	545,095	257,126	677,009	1,484,540	294,650	----	3,258,955
Tuna, bluefin	----	----	----	----	----	3,016	123,101	522,462	564,429	312,700	----	----	1,525,708
Tuna, skipjack	----	----	----	----	----	----	----	----	41,200	----	----	----	41,200
Tuna, skipjack, black	----	----	----	----	----	----	----	----	27,000	----	----	----	27,000
Tuna, yellowfin	----	----	----	----	----	----	----	----	59,895	----	315	----	60,210
Turbot	----	----	----	----	110	250	----	----	----	----	----	----	360
Whitefish, ocean	----	----	----	----	----	57	----	----	----	----	----	----	57
Yellowtail	----	----	----	----	544	371	734	165	29,573	2,546	3,102	21,849	58,884
Miscellaneous	----	----	----	----	----	16	2	196	1	61	----	----	276
Crustacean:													
Crab, rock	42,436	46,133	41,271	47,773	42,737	49,363	59,990	66,126	58,247	76,429	44,107	51,033	625,645
Lobster, spiny	19,570	27,179	15,598	----	----	----	----	----	----	43,083	43,475	24,808	173,713
Mollusk:													
Abalone, black	300	1,325	187	12,449	24,052	47,044	9,791	337	8,449	2,551	3,124	20,399	130,008
Abalone, green	39,718	375	7,347	5,894	42,113	35,100	38,733	431	32,471	17,335	16,474	23,823	259,814
Abalone, pink	5,173	162	20,131	44,385	6,887	8,686	11,400	----	18,963	15,277	13,902	12,014	156,980
Abalone, red	2,703	----	----	127	2,070	2,475	2,426	----	750	5,670	1,260	2,264	19,745
Abalone, white	----	----	----	----	----	4,312	4,868	----	5,561	19,627	13,338	9,835	57,541
Octopus	----	10	----	135	----	----	----	----	----	2	----	43	190
Squid	123,600	1,479,950	579,350	434,150	313,250	746,200	218,100	110,500	----	----	47,100	203,900	4,256,100
Miscellaneous mollusk	----	----	----	----	----	----	----	----	----	27	----	----	27
Total pounds	26,434,625	20,901,193	9,936,537	9,002,496	6,667,678	3,792,921	8,940,527	11,417,334	21,169,359	27,073,727	26,421,843	13,543,898	185,302,138
Waters north of State:													
Fish:													
Tuna, albacore	----	----	----	----	----	----	----	----	196,858	694,192	----	----	891,050
Total pounds	----	----	----	----	----	----	----	----	196,858	694,192	----	----	891,050
Waters south of State:													
Fish:													
Bonito, Pacific	226,152	113,389	22,930	218,865	594,243	1,218,258	235,810	1,788,131	101,670	347,485	4,758	----	4,871,691
Dolphinfish	1,060	991	----	----	85	----	----	----	----	85	----	----	2,221
Halibut, California	----	80	----	----	----	----	----	----	----	----	----	----	80
Mackerel, jack	----	----	----	----	----	----	----	----	45	575	----	----	620
Perch	----	134	100	177	----	----	----	----	----	----	----	----	411

TABLE 13—Continued

Monthly Landings and Shipments of Commercial Fish Into the Los Angeles Area During 1972—Continued

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Waters south of State—Continued													
Fish—Continued													
Pompano, Pacific	----	----	----	----	----	----	----	----	----	90	----	----	90
Rockfish	----	480	470	203	5,888	----	68	----	855	38	----	160	8,162
Sargo	----	----	----	229	----	----	----	----	----	----	----	----	229
Sea bass, giant	1,947	21,404	7,976	1,030	1,387	----	78	----	18,830	21,673	1,108	3,223	78,656
Seabass, white	13,932	65,848	53,767	21,078	5,497	----	480	----	2,001	3,304	1,362	1,651	168,920
Shark	----	----	----	----	600	----	----	----	----	----	----	----	600
Sheephead, California	----	----	----	----	145	----	20	----	----	----	----	----	165
Tuna, albacore	----	1,970	----	----	----	17,694	47,226	187,093	294,358	58,088	4,072	----	610,501
Tuna, bigeye	----	158,215	----	----	29,010	----	----	----	----	----	----	----	187,225
Tuna, bluefin	----	7,420	----	----	----	2,772,520	1,087,267	5,285,386	2,323,702	2,349,075	189,323	----	14,014,693
Tuna, skipjack	4,558	1,053,186	1,524,813	1,479,732	4,156,093	1,910,591	4,339,238	2,306,101	374,708	262,289	1,724,902	5,117,364	24,253,575
Tuna, skipjack, black	----	----	35,900	----	611,498	311,346	6,640	----	----	----	360	----	965,744
Tuna, yellowfin	3,390,114	20,713,370	25,854,666	28,889,755	29,992,729	20,591,798	18,190,426	12,546,521	8,479,748	16,577,878	7,368,646	2,108,245	194,703,896
Wahoo	----	----	----	197	----	450	----	----	----	246	----	----	893
Whitefish, ocean	70	----	----	240	----	----	----	----	----	320	80	95	805
Yellowtail	4,748	23,503	10,587	4,274	1,968	8,140	2,680	----	----	10,032	24,016	24,071	114,019
Total pounds	3,642,581	22,159,990	27,511,209	30,615,780	35,399,143	26,830,797	23,909,933	22,113,232	11,595,917	19,631,178	9,318,627	7,254,809	239,983,196
Central Pacific Islands:													
Fish:													
Tuna, albacore	----	----	----	----	----	8,174	----	----	----	----	----	----	8,174
Total pounds	----	----	----	----	----	8,174	----	----	----	----	----	----	8,174
SHIPMENTS:*													
Fish:													
Tuna, albacore	2,362,408	976,488	5,300,738	3,696,738	3,021,836	2,830,942	12,842,776	16,940,650	7,569,861	3,835,256	8,024,452	3,447,054	70,849,199
Tuna, bigeye	8,495	----	1,978	----	----	----	62,252	4,924	4,926	23,620	----	77,025	183,220
Tuna, bluefin	----	----	----	4,114,139	69,985	101,062	562,029	846,901	351,187	----	----	----	6,045,303
Tuna, skipjack	4,875,974	2,880,161	12,424,885	8,803,417	8,147,295	7,171,753	5,954,376	8,353,095	4,873,846	7,270,589	4,054,887	5,016,482	79,826,760
Tuna, skipjack, black	----	----	----	----	62,355	120,240	25,008	1,410	1,450	170,846	41,830	----	423,139
Tuna, yellowfin	2,351,618	327,664	3,219,710	3,803,360	3,270,189	2,539,068	2,980,182	1,584,393	3,628,323	1,856,999	2,498,880	3,013,033	31,073,419
Total pounds	9,598,495	4,184,313	20,947,311	20,417,654	14,571,660	12,763,065	22,426,623	27,731,373	16,429,593	13,157,310	14,620,049	11,553,594	188,401,040
Grand total	**39,675,701**	**47,245,496**	**58,395,057**	**60,035,930**	**56,638,481**	**43,394,957**	**55,277,083**	**61,261,939**	**49,391,727**	**60,556,407**	**50,360,519**	**32,352,301**	**614,585,598**

* For origin of shipments refer to Table 6. Beginning in 1965 only tuna shipments are recorded.

TABLE 14

Monthly Landings and Shipments of Commercial Fish Into the San Diego Area During 1972

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
LANDINGS FROM:													
California waters:													
Fish:													
Anchovy, northern	----	----	29	120	994	----	28	113	----	----	----	----	1,284
Barracuda, California	41	28	292	258	937	430	724	97	73	551	203	----	3,634
Bonito, Pacific	39	48	135	13	97	170	47,765	1,944	31,037	28,019	765	20,286	130,318
Cabezon	----	8	----	----	----	----	----	----	50	----	----	----	58
Croaker, white	----	626	42	----	185	45	----	138	----	530	----	----	1,566
Dolphinfish	294	940	----	----	----	----	----	----	10	173	----	----	1,417
Flounder	----	----	----	----	----	30	135	44	----	----	----	26	235
Halfmoon	1,985	714	1,103	3,156	2,823	4,185	1,149	1,126	980	1,567	1,343	1,077	21,208
Halibut, California	1,608	2,964	1,465	1,201	4,039	2,149	2,500	547	4,025	1,522	611	396	23,027
Lingcod	----	82	----	55	----	----	----	20	----	100	----	----	257
Mackerel, jack	----	32	28	----	----	----	----	60	----	----	276	----	396
Mackerel, Pacific	390	----	----	895	270	150	260	140	215	217	----	32	2,569
Opaleye	121	----	187	----	----	----	----	----	----	----	----	----	308
Perch	4	2,606	2,645	1,056	3,730	597	1,854	4,848	2,290	1,608	659	1,459	23,356
Pompano, Pacific	----	----	----	----	----	----	80	----	----	----	----	----	80
Rockfish	54,002	86,400	65,824	69,828	76,310	40,668	32,376	34,249	26,261	38,071	28,024	35,749	587,762
Sablefish	----	282	----	----	----	----	----	----	----	----	----	----	282
Salmon	----	----	----	----	----	----	19	22	----	----	----	----	41
Sanddab	----	66	40	47	----	----	86	17	----	----	----	16	272
Sardine, Pacific	----	2,900	3,550	517	7,621	----	----	----	15,733	6,200	9,400	----	45,921
Sculpin	1,412	1,726	739	1,205	488	12,609	12,934	7,719	2,580	4,180	5,693	5,416	56,701
Sea bass, giant	844	132	463	----	26	1,025	209	277	----	----	70	----	3,046
Seabass, white	25,001	19,681	25,747	3,283	6,066	11,069	7,393	48,555	14,098	8,995	13,091	38,706	221,685
Shark	6,814	1,283	854	1,186	4,569	14,214	11,749	8,292	13,591	2,873	6,231	8,256	79,912
Sheephead, California	132	66	----	91	347	122	50	17	188	633	56	176	1,878
Smelt	----	----	----	----	----	----	19	30	----	----	----	150	199
Sole, petrale	----	48	294	90	----	----	----	----	118	4	----	----	554
Sole, miscellaneous	50	132	122	59	117	361	21	18	114	15	204	18	1,231
Swordfish	----	----	----	----	2,095	877	25,245	52,565	22,901	817	----	----	104,500
Tuna, albacore	----	----	----	----	----	21,089	273,398	157,380	192,844	1,064,321	80,381	658	1,790,071
Tuna, bluefin	----	----	----	----	----	----	90	106	58	----	----	----	254
Tuna, skipjack	----	----	----	----	----	----	----	----	12	206	----	----	218
Tuna, yellowfin	----	----	----	11,272	----	----	26	14	----	----	----	----	11,312
Whitefish, ocean	----	278	172	----	----	211	485	188	----	----	----	78	1,412
Yellowtail	40	----	411	334	2,457	3,928	970	1,491	7,860	2,773	6,995	8,692	35,951
Miscellaneous	----	----	----	----	28	132	12	----	33	20	----	----	225

TABLE 14—Continued

Monthly Landings and Shipments of Commercial Fish Into the San Diego Area During 1972—Continued

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total pounds
Crustacean:													
Crab, rock	3,340	1,981	111	114	453	2,858	6,994	1,449	140	3,051	2,478	2,556	25,525
Lobster, spiny	11,297	10,361	8,204	----	----	----	----	----	----	56,841	32,473	18,020	137,196
Echinoderm:													
Sea urchin	1,728	2,358	----	----	----	----	----	----	----	----	----	----	4,086
Mollusk:													
Abalone, black	90	----	12	1,404	10,220	14,944	2,874	----	1,750	221	350	404	32,269
Abalone, green	34,635	----	9,896	26,668	29,618	16,290	12,852	258	2,457	3,981	7,259	17,872	161,786
Abalone, pink	18,452	----	12,442	13,510	14,717	6,975	4,123	579	5,415	12,328	13,825	5,763	108,129
Abalone, red	12,937	----	13,336	9,793	14,416	4,962	17,732	----	17,084	5,536	6,835	4,719	107,350
Abalone, threaded	----	----	----	----	----	4	59	----	29	145	284	159	680
Abalone, white	25,470	----	10,883	9,820	7,129	3,416	3,722	991	2,170	3,936	13,803	4,783	86,123
Octopus	----	13	----	----	----	----	----	----	----	----	----	----	13
Oyster, giant Pacific	13	26	26	26	12	6	3	9	6	3	12	12	154
Squid	150	----	287	----	62	----	----	----	----	----	----	----	499
Total pounds	200,889	135,781	159,339	156,001	189,826	163,516	467,936	323,303	364,122	1,249,437	231,321	175,479	3,816,950
Waters north of State:													
Fish:													
Tuna, albacore	----	----	----	----	----	----	----	----	23,074	----	----	----	23,074
Total pounds	----	----	----	----	----	----	----	----	23,074	----	----	----	23,074
Waters south of State:													
Fish:													
Anchovy, northern	----	----	----	----	----	----	----	51	----	----	----	----	51
Bonito, Pacific	58,636	99,250	98,529	128,575	181,453	312,334	11,067	415,117	26,228	354,120	129,410	24,856	1,839,575
Dolphinfish	310	1,102	----	1,804	----	----	----	69	128	----	244	----	3,657
Halibut, California	----	49	42	21	----	----	----	----	----	----	44	6	162
Mackerel, jack	----	----	----	----	----	----	----	----	62	----	----	----	62
Mackerel, Pacific	----	----	----	----	----	----	----	----	43	----	----	----	43
Perch	----	----	----	32	----	----	----	----	----	----	----	----	32
Rockfish	9,020	12,219	1,735	4,637	1,783	----	1,169	388	1,943	200	377	541	34,012
Sculpin	----	----	----	----	2,094	27,549	19,438	20,753	286	----	----	----	70,120
Sea bass, giant	1,441	1,269	524	483	----	----	----	128	----	370	113	----	4,328

Seabass, white	15,110	10,509	6,720	314	----	----	----	----	3,889	14,496	5,671	868	57,577
Shark	8,581	12,248	564	524	----	----	----	2,225	2,875	1,660	7,325	74	36,076
Sole, miscellaneous	----	----	----	----	----	----	18	----	----	----	----	----	18
Swordfish	----	----	120	2,256	----	----	1,982	----	----	----	----	----	4,358
Tuna, albacore	----	----	----	----	----	2,596	579,470	378,380	280,171	285,018	177,180	683	1,703,498
Tuna, bigeye	----	----	----	----	----	----	----	----	----	4,251	----	----	4,251
Tuna, bluefin	----	----	----	----	----	947,224	1,232,205	2,769,251	1,775,214	1,812,110	801,062	----	9,337,066
Tuna, skipjack	163,445	645,013	1,046,795	776,505	1,683,660	2,314,269	2,241,557	1,065,971	250,574	175,903	398,796	887,403	11,649,891
Tuna, skipjack, black	----	----	----	----	----	115,376	990	----	----	----	----	----	116,366
Tuna, yellowfin	183,017	8,778,031	7,086,539	10,102,632	7,497,933	4,573,762	1,379,440	1,512,504	3,070,846	465,735	1,607,261	671,864	46,929,564
Wahoo	----	----	465	278	----	----	----	----	171	----	----	----	914
Whitefish, ocean	----	----	----	----	----	----	----	----	----	----	----	295	295
Yellowtail	2,314	1,227	102	493	1,906	544	36	277	2,532	8,635	21,737	9,147	48,950
Miscellaneous	----	----	26	----	----	----	----	----	----	----	----	----	26
Crustacean:													
Crab, rock	----	----	----	----	----	----	----	----	----	27	----	----	27
Total pounds	441,874	9,560,917	8,242,161	11,018,554	9,368,829	8,293,654	5,467,372	6,165,114	5,414,962	3,122,525	3,149,220	1,595,737	71,840,919
SHIPMENTS:*													
Fish:													
Tuna, albacore	169,181	278,681	40,750	422,828	350,914	----	2,199,640	1,325,561	77,531	408,152	----	8,060	5,281,298
Tuna, bigeye	----	----	----	----	7,991	----	----	----	----	----	----	----	7,991
Tuna, bluefin	----	----	----	----	----	----	----	51,404	----	----	----	----	51,404
Tuna, skipjack	2,061,546	250,631	1,028,359	954,472	1,867,084	----	224,759	660,213	3,478	84,964	----	861,288	7,996,794
Tuna, skipjack, black	----	----	----	----	----	----	----	----	----	----	----	11,265	11,265
Tuna, yellowfin	----	680,548	930,451	92,309	1,621,060	221,324	411,659	232,123	91,048	126,813	158,343	1,142,470	5,708,148
Total pounds	2,230,727	1,209,860	1,999,560	1,469,609	3,847,049	221,324	2,836,058	2,269,301	172,057	619,929	158,343	2,023,083	19,056,900
Grand total	**2,873,490**	**10,906,558**	**10,401,060**	**12,644,164**	**13,405,704**	**8,678,494**	**8,771,366**	**8,757,718**	**5,974,215**	**4,991,891**	**3,538,884**	**3,794,299**	**94,737,843**

* For origin of shipments refer to Table 6. Beginning in 1965 only tuna shipments are recorded.

TABLE 15

Value of Landings and Shipments of Commercial Fish Into California by Area, 1972

Species	Eureka	San Francisco	Monterey	Santa Barbara	Los Angeles	San Diego	Total
LANDINGS:							
Fish:							
Anchovy, northern	----	360,727	1,188,098	27,476,975	109,174,438	1,335	138,201,573
	----	$28,767	$24,263	$364,475	$1,260,196	$213	$1,677,914
Barracuda, California	----	----	----	880	9,401	3,634	13,915
	----	----	----	$320	$3,370	$1,180	$4,870
Blacksmith	----	----	----	----	75,880	----	75,880
	----	----	----	----	$2,655	----	$2,655
Bonito, Pacific	650	5,478	47,821	2,637,149	17,651,636	1,969,893	22,312,627
	$85	$535	$3,442	$224,286	$1,628,816	$198,353	$2,055,517
Cabezon	476	979	2,251	2,089	----	58	5,853
	$24	$104	$164	$83	----	$7	$382
Croaker, white	----	20,226	146,147	2,445	203,026	1,566	373,410
	----	$3,867	$12,342	$49	$16,196	$277	$32,731
Dolphinfish	----	----	----	339	2,371	5,074	7,784
	----	----	----	$136	$464	$1,761	$2,361
Flounder	289,191	311,238	50,569	8,442	35	235	659,710
	$21,143	$23,092	$6,095	$810	$5	$47	$51,192
Flounder, arrowtooth	156,117	7,830	----	----	----	----	163,947
	$7,830	$426	----	----	----	----	$8,256
Flyingfish	----	----	----	----	128,889	----	128,889
	----	----	----	----	$19,903	----	$19,903
Grenadiers	64,023	----	----	----	----	----	64,023
	$3,204	----	----	----	----	----	$3,204
Hake, Pacific	----	9,290	----	875	360	----	10,525
	----	$228	----	$18	$18	----	$264
Halfmoon	----	----	----	----	5,914	21,208	27,122
	----	----	----	----	$1,453	$5,683	$7,136
Halibut, California	40	107,162	49,556	89,054	40,244	23,189	309,245
	$23	$36,281	$20,885	$45,613	$19,718	$13,069	$135,589
Halibut, Pacific	213	22	----	----	----	----	235
	$86	$7	----	----	----	----	$93
Herring, Pacific	----	21,808	103,640	----	----	----	125,448
	----	$13,826	$13,588	----	----	----	$27,414
Lingcod	2,062,353	393,695	273,199	515,599	1,083	257	3,246,186
	$215,980	$36,007	$34,115	$52,348	$211	$33	$338,694
Mackerel, jack	2,742	1,390	124,246	771,916	50,216,821	458	51,117,573
	$139	$70	$10,503	$32,282	$2,109,810	$53	$2,152,857
Mackerel, Pacific	----	----	----	----	105,466	2,612	108,078
	----	----	----	----	$6,006	$507	$6,513
Mudsucker, longjaw	----	1,287	----	----	2	----	1,289
	----	$3,860	----	----	$2	----	$3,862
Opaleye	----	----	----	----	15,082	308	15,390
	----	----	----	----	$3,905	$68	$3,973
Perch	69,004	35,353	5,228	14,599	125,341	23,388	272,913
	$13,335	$12,217	$1,072	$4,544	$6,967	$6,163	$44,298
Pompano, Pacific	----	702	4,830	2,345	146,975	80	154,932
	----	$766	$4,620	$112	$36,492	$20	$42,010
Queenfish	----	----	----	----	46,473	----	46,473
	----	----	----	----	$955	----	$955
Rockfish	6,537,176	1,621,710	3,677,582	3,291,223	671,787	621,774	16,421,252
	$455,700	$132,657	$330,693	$291,015	$140,789	$139,435	$1,490,289
Sablefish	5,403,642	1,194,904	1,784,733	10,947	1,206	282	8,395,714
	$430,938	$84,983	$132,501	$738	$281	$23	$649,464
Salmon	3,369,156	2,503,404	420,664	130,024	----	41	6,423,289
	$2,338,463	$2,027,319	$357,108	$106,861	----	$31	$4,829,782
Sanddab	525,113	227,470	167,091	517	359	272	920,822
	$63,147	$26,528	$16,636	$81	$54	$68	$106,514
Sardine, Pacific	----	----	----	----	326,309	45,921	372,230
	----	----	----	----	$48,941	$11,334	$60,275
Sargo	----	----	----	----	866	----	866
	----	----	----	----	$151	----	$151
Sculpin	----	----	----	----	5,195	126,821	132,016
	----	----	----	----	$2,136	$45,258	$47,394
Sea bass, giant	----	----	----	808	87,131	7,374	95,313
	----	----	----	$199	$26,526	$1,991	$28,716
Seabass, white	----	491	8,049	77,195	412,391	279,262	777,388
	----	$279	$4,055	$41,053	$199,672	$148,096	$393,155
Shark	16,077	78,811	39,873	74,673	75,347	115,988	400,769
	$1,134	$4,085	$2,375	$10,107	$12,993	$26,081	$56,775
Sheephead, California	----	----	----	164	5,042	1,878	7,084
	----	----	----	$20	$648	$280	$948
Skate	48,002	5,934	63,454	452	544	----	118,386
	$1,178	$153	$1,470	$35	$80	----	$2,916
Smelt	306,746	27,435	18,367	41,750	119,801	199	514,298
	$23,201	$3,651	$2,989	$835	$5,710	$42	$36,428
Smelt, whitebait	165,159	24,199	----	----	----	----	189,358
	$18,659	$3,420	----	----	----	----	$22,079
Sole, Dover	18,384,776	3,551,693	51,415	92,793	1,020	----	22,081,697
	$1,504,302	$291,894	$3,284	$8,116	$92	----	$1,807,688
Sole, English	1,454,458	929,122	310,025	307,007	1,353	----	3,001,965
	$168,849	$106,353	$33,940	$33,023	$205	----	$342,370

TABLE 15—Continued

Value of Landings and Shipments of Commercial Fish Into California by Area, 1972—Continued

Species	Eureka	San Francisco	Monterey	Santa Barbara	Los Angeles	San Diego	Total
Sole, petrale	1,546,500	1,158,436	338,011	531,181	563	554	3,575,245
	$260,168	$189,433	$58,543	$90,917	$106	$200	$599,367
Sole, rex	1,334,185	202,141	52,115	73,120	49	----	1,661,610
	$161,302	$25,164	$5,413	$9,074	$8	----	$200,961
Sole, sand	192,215	161,015	7,185	28,737	----	----	389,152
	$24,626	$20,712	$890	$4,024	----	----	$50,252
Sole, miscellaneous	7,802	913	5,258	14,224	611	1,249	30,057
	$554	$130	$675	$1,479	$128	$415	$3,381
Swordfish	----	245	----	34,320	122,559	108,858	265,982
	----	$147	----	$19,132	$72,997	$67,361	$159,637
Tuna, albacore	936,032	3,398,786	4,452,673	3,928,400	4,768,680	3,516,643	21,001,214
	$297,965	$1,089,891	$1,424,923	$1,258,159	$1,626,358	$1,186,758	$6,884,054
Tuna, bigeye	----	----	----	----	187,225	4,251	191,476
	----	----	----	----	$40,812	$939	$41,751
Tuna, bluefin	----	----	----	----	15,540,401	9,337,320	24,877,721
	----	----	----	----	$3,344,234	$1,967,421	$5,311,655
Tuna, skipjack	----	----	----	----	24,294,775	11,650,109	35,944,884
	----	----	----	----	$4,860,543	$2,355,349	$7,215,892
Tuna, skipjack, black	----	----	----	----	992,744	116,366	1,109,110
	----	----	----	----	$76,159	$8,727	$84,886
Tuna, yellowfin	----	----	----	----	194,764,106	46,940,876	241,704,982
	----	----	----	----	$42,970,725	$10,376,097	$53,346,822
Turbot	6,409	8,811	----	2,543	360	----	18,123
	$765	$551	----	$204	$54	----	$1,574
Wahoo	----	----	----	----	893	914	1,807
	----	----	----	----	$186	$185	$371
Whitefish, ocean	----	----	----	----	862	1,707	2,569
	----	----	----	----	$105	$218	$323
Yellowtail	----	----	----	267	172,903	84,901	258,071
	----	----	----	$103	$23,887	$14,982	$38,972
Miscellaneous	186	167	106	187	276	251	1,173
	$13	$1	$10	$4	$89	$89	$206
Miscellaneous (animal food)	----	----	----	370,053	----	----	370,053
	----	----	----	$7,401	----	----	$7,401
Crustacean:							
Crab, dungeness	1,206,509	335,395	287	20,815	----	----	1,563,006
	$644,808	$228,865	$161	$14,702	----	----	$888,536
Crab, rock	1,040	----	199	191,094	625,545	25,552	843,530
	----	----	$10	$20,349	$91,877	$4,033	$116,269
Lobster, spiny	----	----	----	87,308	173,713	137,196	398,217
	----	----	----	$131,109	$273,289	$217,621	$622,019
Prawn, spot	----	----	20,970	----	----	----	20,970
	----	----	$22,707	----	----	----	$22,707
Shrimp, ocean	2,269,548	220,322	----	----	----	----	2,489,870
	$340,436	$33,094	----	----	----	----	$373,530
Echinoderm:							
Sea urchin	----	20	----	72,351	----	4,086	76,457
	----	$2	----	$3,945	----	$504	$4,451
Miscellaneous echinoderm	----	1,260	----	----	----	----	1,260
	----	$381	----	----	----	----	$381
Mollusk:							
Abalone, black	----	----	----	852,615	130,008	32,269	1,014,892
	----	----	----	$145,116	$21,382	$7,444	$173,942
Abalone, green	----	----	----	3,228	259,814	161,786	424,828
	----	----	----	$1,505	$125,869	$88,215	$215,589
Abalone, pink	----	----	----	138,600	156,980	108,129	403,709
	----	----	----	$76,702	$77,050	$56,041	$209,793
Abalone, red	----	33,098	150	944,119	19,745	107,350	1,104,462
	----	$15,420	$90	$484,762	$9,823	$52,310	$562,405
Abalone, threaded	----	----	----	1,188	----	680	1,868
	----	----	----	$419	----	$205	$624
Abalone, white	----	----	----	155	57,541	86,123	143,819
	----	----	----	$107	$33,154	$52,483	$85,744
Octopus	5,233	3,097	1,531	518	190	13	10,582
	$519	$264	$381	$62	$35	$4	$1,265
Oyster, eastern	----	9,028	----	----	----	----	9,028
	----	$26,543	----	----	----	----	$26,543
Oyster, giant Pacific	751,832	95,555	----	28,586	----	154	876,127
	$654,094	$83,132	----	$24,870	----	----	$762,096
Squid	----	----	12,258,278	3,644,435	4,256,100	499	20,159,312
	----	----	$389,178	$52,625	$91,951	$56	$533,810
Miscellaneous mollusk	185	60	310	----	27	----	582
	$30	$150	$4	----	$4	----	$188
Total pounds	47,112,790	17,070,709	25,673,911	46,518,304	426,184,558	75,680,943	638,241,215
Total value	$7,652,700	$4,555,255	$2,919,125	$3,563,929	$59,296,245	$17,057,730	$95,044,984

TABLE 15—Continued

Value of Landings and Shipments of Commercial Fish Into California by Area, 1972—Continued

Species	Eureka	San Francisco	Monterey	Santa Barbara	Los Angeles	San Diego	Total
SHIPMENTS:*							
Fish:							
Tuna, albacore	----	----	----	----	**70,849,199**	**5,281,298**	**76,130,497**
	----	----	----	----	$29,860,981	$2,137,082	$31,998,063
Tuna, bigeye	----	----	----	----	**183,220**	**7,991**	**191,211**
	----	----	----	----	$49,907	$1,798	$51,705
Tuna, bluefin	----	----	----	----	**6,045,303**	**51,404**	**6,096,707**
	----	----	----	----	$1,710,836	$10,846	$1,721,682
Tuna, skipjack	----	----	----	----	**79,826,760**	**7,996,794**	**87,823,554**
	----	----	----	----	$19,666,057	$1,969,227	$21,635,284
Tuna, skipjack, black	----	----	----	----	**423,139**	**11,265**	**434,404**
	----	----	----	----	$37,060	$845	$37,905
Tuna, yellowfin	----	----	----	----	**31,073,419**	**5,708,148**	**36,781,567**
	----	----	----	----	$10,229,403	$1,800,635	$12,030,038
Total pounds	----	----	----	----	**188,401,040**	**19,056,900**	**207,457,940**
Total value	----	----	----	----	$61,554,244	$5,920,433	$67,474,677
GRAND TOTAL POUNDS	**47,112,790**	**17,070,709**	**25,673,911**	**46,518,304**	**614,585,598**	**94,737,843**	**845,699,155**
GRAND TOTAL VALUE	$7,652,700	$4,555,255	$2,919,125	$3,563,929	$120,850,489	$22,978,163	$162,519,661

* For origin of shipments refer to Table 6. Beginning in 1965 only tuna shipments are recorded.

TABLE 16

Value of Landings by Port, Eureka Area, 1972

	Pounds	Value
Eureka		
Dover sole	12,200,654	$998,297
Salmon	1,136,028	801,096
Giant Pacific oyster	751,832	654,094
Dungeness crab	462,009	246,917
Rockfish	2,959,965	198,890
Sablefish	2,102,161	167,646
Albacore	512,255	163,065
Petrale sole	769,160	129,396
Rex sole	796,511	96,297
English sole	728,427	84,564
Lingcod	605,097	63,369
Sanddab	387,721	46,625
Ocean shrimp	129,112	19,367
Smelt	259,046	19,026
Whitebait smelt	92,258	10,423
Perch	42,990	8,311
Flounder	78,763	5,758
Sand sole	38,131	4,885
Arrowtooth flounder	87,681	4,398
Grenadiers	64,023	3,204
All other species	25,916	1,307
Port totals	24,229,740	$3,726,935
Fort Bragg		
Salmon	1,580,623	$1,103,742
Dover sole	2,865,904	234,498
Sablefish	2,382,721	190,021
Rockfish	1,758,480	125,438
Lingcod	769,388	80,574
Petrale sole	401,867	67,606
Dungeness crab	96,453	51,548
Albacore	127,083	40,454
Rex sole	217,700	26,320
English sole	182,033	21,132
Ocean shrimp	95,852	14,378
Whitebait smelt	36,744	4,151
Smelt	31,107	2,743
Arrowtooth flounder	50,284	2,522
Sanddab	8,821	1,061
All other species	27,273	1,890
Port totals	10,632,333	$1,968,078
Crescent City		
Salmon	503,128	$338,155
Ocean shrimp	2,044,584	306,691
Dover sole	3,318,218	271,507
Dungeness crab	473,767	253,201
Rockfish	1,807,593	130,528
Albacore	294,184	93,647
Sablefish	918,248	73,230
Lingcod	683,128	71,540
Petrale sole	375,473	63,166
English sole	543,998	63,153
Rex sole	319,974	38,685
Sand sole	153,984	19,728
Sanddab	128,571	15,461
Flounder	208,273	15,227
Perch	25,417	4,949
Whitebait smelt	36,157	4,085
All other species	68,989	3,383
Port totals	11,903,686	$1,766,336
Trinidad		
Dungeness crab	174,280	$93,142
Salmon	76,231	46,452
All other species	2,534	802
Port totals	253,045	$140,396

TABLE 16—Continued

Value of Landings by Port, Eureka Area, 1972—Continued

	Pounds	Value
Albion		
Salmon	43,997	$30,496
All other species	16,351	1,377
Port totals	60,348	$31,873
All other ports		
Salmon	29,149	$18,522
All other species	4,489	560
Totals	33,638	$19,082
EUREKA AREA TOTALS	**47,112,790**	**$7,652,700**

TABLE 17

Value of Landings by Port, San Francisco Area, 1972

	Pounds	Value
Bodega Bay		
Salmon	1,308,355	$1,051,798
Albacore	207,399	66,507
Dungeness crab	86,964	59,342
Dover sole	665,864	54,724
Rockfish	489,393	43,244
English sole	360,263	41,238
Ocean shrimp	213,452	32,062
Petrale sole	145,693	23,824
Sablefish	305,878	21,754
Rex sole	89,075	11,089
Lingcod	78,571	7,186
Flounder	77,140	5,723
Sanddab	31,165	3,635
Smelt	24,098	3,094
Whitebait smelt	14,929	2,110
Sand sole	10,356	1,332
All other species	21,368	2,450
Port totals	4,129,963	$1,431,112
San Francisco		
Albacore	1,335,296	$428,190
Dover sole	2,081,512	171,068
Petrale sole	982,308	160,632
Salmon	142,285	116,208
Dungeness crab	149,206	101,814
Rockfish	1,009,963	81,338
English sole	566,066	64,795
Sablefish	780,000	55,474
Lingcod	299,966	27,434
Sanddab	195,325	22,779
Sand sole	149,714	19,258
California halibut	51,202	17,335
Flounder	215,082	15,958
Rex sole	110,208	13,720
Perch	6,987	2,415
Shark	32,673	1,662
Ocean shrimp	6,870	1,032
All other species	31,126	2,731
Port totals	8,145,789	$1,303,843
Sausalito		
Albacore	1,082,822	$347,229
Salmon	270,210	218,612
Dover sole	364,656	29,969
Northern anchovy	360,727	28,767
Pacific herring	9,700	6,150
Dungeness crab	8,148	5,560
Petrale sole	30,088	4,920
Sablefish	63,266	4,500
Rockfish	42,431	2,453
All other species	9,822	993
Port totals	2,241,870	$649,153
Princeton		
Salmon	458,820	$377,512
Albacore	199,427	63,950
Dungeness crab	55,805	38,080
California halibut	53,296	18,044
Red abalone	33,098	15,420
Rockfish	28,133	2,538
Shark	42,359	2,218
Whitebait smelt	9,270	1,310
Flounder	17,411	1,292
All other species	12,543	1,408
Port totals	910,162	$521,772

TABLE 17—Continued

Value of Landings by Port, San Francisco Area, 1972—Continued

	Pounds	Value
Oakland		
Albacore	572,430	$183,562
Salmon	86,301	69,148
Dover sole	439,661	36,133
Sablefish	45,610	3,244
Rockfish	47,098	2,632
Dungeness crab	2,063	1,408
All other species	7,181	1,098
Port totals	1,200,344	$297,225
Point Reyes		
Salmon	182,493	$148,325
Giant Pacific oyster	74,014	64,392
Dungeness crab	17,723	12,094
All other species	3,220	595
Port totals	277,450	$225,406
Berkeley		
Salmon	52,589	$43,766
Dungeness crab	14,870	10,147
All other species	5,725	1,505
Port totals	73,184	$55,418
Tomales Bay		
Eastern oyster	9,028	$26,543
Giant Pacific oyster	21,541	18,740
Pacific herring	12,000	7,608
All other species	4,478	1,094
Port totals	47,047	$53,985
Richmond		
Perch	16,373	$5,684
White croaker	16,193	3,095
Salmon	2,106	1,748
All other species	1,613	153
Port totals	36,285	$10,680
All other ports		
Longjaw mudsucker	1,287	$3,860
Perch	5,577	1,927
All other species	1,751	874
Totals	8,615	$6,661
SAN FRANCISCO AREA TOTALS	**17,070,709**	**$4,555,255**

TABLE 18

Value of Landings by Port, Monterey Area, 1972

	Pounds	Value
Monterey		
Albacore	2,041,166	$653,204
Rockfish	3,572,445	318,865
Squid	9,724,090	308,722
Sablefish	1,672,717	124,185
Petrale sole	302,083	52,320
Lingcod	236,341	29,513
English sole	222,225	24,328
Spot prawn	20,970	22,707
Salmon	16,443	14,027
White croaker	129,787	10,960
Jack mackerel	116,746	9,869
Sanddab	91,423	9,102
California halibut	17,936	7,559
Rex sole	46,300	4,809
Northern anchovy	112,890	2,305
Dover sole	35,945	2,296
Shark	25,636	1,461
Pacific bonito	18,715	1,347
Skate	43,405	1,006
All other species	22,123	4,095
Port totals	18,469,386	$1,602,680
Moss Landing		
Albacore	2,379,734	$761,551
Salmon	380,417	322,604
Squid	2,534,188	80,456
Northern anchovy	1,075,208	21,958
Pacific herring	102,332	13,416
English sole	87,736	9,605
Rockfish	76,506	8,787
Sablefish	112,016	8,316
Sanddab	75,331	7,500
Petrale sole	35,928	6,223
Lingcod	27,350	3,415
Smelt	14,007	2,294
Pacific bonito	26,917	1,937
Flounder	10,713	1,291
All other species	62,859	4,892
Port totals	7,001,242	$1,254,245
Santa Cruz		
Salmon	23,804	$20,477
California halibut	30,296	12,768
Albacore	31,773	10,168
White seabass	7,937	3,999
Flounder	33,075	3,987
Pacific pompano	4,052	3,876
Rockfish	28,631	3,041
Lingcod	9,508	1,187
All other species	34,207	2,697
Port totals	203,283	$62,200
MONTEREY AREA TOTALS	**25,673,911**	**$2,919,125**

TABLE 19

Value of Landings by Port, Santa Barbara Area, 1972

	Pounds	Value
Morro Bay		
Albacore	3,214,077	$1,029,381
Rockfish	1,848,351	163,061
Red abalone	219,687	112,799
Petrale sole	287,245	49,165
Salmon	51,264	42,690
Lingcod	385,699	39,159
Giant Pacific oyster	28,586	24,870
Dungeness crab	16,225	11,460
English sole	63,860	6,869
California halibut	10,751	5,507
White seabass	10,084	5,363
Sea urchin	69,861	3,809
Rock crab	26,655	2,838
Dover sole	31,708	2,773
Perch	8,813	2,733
Rex sole	21,126	2,622
All other species	39,609	4,723
Port totals	6,333,601	$1,509,822
Santa Barbara		
Red abalone	640,543	$328,890
Black abalone	823,505	140,162
Rockfish	1,145,397	98,951
Spiny lobster	52,852	79,367
Pink abalone	135,509	74,991
White seabass	58,881	31,313
Pacific bonito	322,332	27,414
Petrale sole	107,725	18,438
California halibut	34,270	17,553
Swordfish	30,081	16,769
English sole	130,749	14,064
Rock crab	122,272	13,021
Rex sole	46,879	5,817
Salmon	6,165	5,299
Miscellaneous (animal food)	248,370	4,967
Lingcod	48,451	4,919
Shark	35,243	4,777
Dover sole	44,905	3,928
Albacore	6,791	2,175
Green abalone	3,228	1,505
All other species	4,622	1,132
Port totals	4,048,770	$895,452
Port Hueneme		
Northern anchovy	27,476,975	$364,475
Pacific bonito	2,258,295	192,066
Squid	3,644,435	52,625
Jack mackerel	770,600	32,227
Spiny lobster	7,154	10,743
California halibut	9,017	4,618
Shark	16,065	2,249
Black abalone	11,600	1,974
Red abalone	3,491	1,792
Swordfish	3,118	1,738
Pink abalone	2,347	1,299
White seabass	2,409	1,281
All other species	55,850	2,180
Port totals	34,261,356	$669,267
Avila		
Albacore	698,387	$223,674
Salmon	72,595	58,872
Red abalone	78,793	40,457
Rockfish	277,169	26,788
Petrale sole	136,134	23,301

TABLE 19—Continued
Value of Landings by Port, Santa Barbara Area, 1972—Continued

	Pounds	Value
Avila—Continued		
English sole	109,280	11,755
Lingcod	81,397	8,264
California halibut	10,039	5,142
Sand sole	28,697	4,018
Rock crab	35,359	3,765
Dungeness crab	4,590	3,242
Miscellaneous (animal food)	120,298	2,406
Pacific bonito	25,250	2,147
White seabass	4,002	2,128
Perch	5,505	1,723
Dover sole	16,180	1,415
Miscellaneous sole	12,878	1,339
All other species	23,075	2,597
Port totals	1,739,628	$423,033
Oxnard		
Spiny lobster	25,892	$38,882
California halibut	24,965	12,787
Albacore	8,183	2,621
Rockfish	17,374	1,905
Pacific bonito	20,275	1,724
Black abalone	9,885	1,682
All other species	18,732	4,064
Port totals	125,306	$63,665
Ventura		
Spiny lobster	804	$1,207
All other species	7,101	1,285
Port totals	7,905	$2,492
All other ports		
All species	1,738	$198
Totals	1,738	$198
SANTA BARBARA AREA TOTALS	**46,518,304**	**$3,563,929**

TABLE 20

Value of Landings and Shipments by Port, Los Angeles Area, 1972

	Pounds	Value
Terminal Island		
Landings		
Yellowfin tuna	194,545,756	$42,922,551
Skipjack tuna	24,289,458	4,859,479
Bluefin tuna	14,971,867	3,221,888
Jack mackerel	44,562,634	1,872,255
Albacore	4,682,619	1,597,007
Pacific bonito	14,565,776	1,344,065
Northern anchovy	105,291,561	1,215,376
Black skipjack tuna	900,681	69,096
Bigeye tuna	187,225	40,812
Sardine	35,648	5,347
Perch	107,825	4,363
Pacific mackerel	71,795	4,089
All other species	1,100	24
Total landings	404,213,945	$57,156,352
Shipments*		
Albacore	70,849,199	$29,860,981
Skipjack tuna	79,789,260	19,656,819
Yellowfin tuna	31,073,419	10,229,403
Bluefin tuna	6,045,303	1,710,836
Bigeye tuna	183,220	49,907
Black skipjack tuna	423,139	37,060
Total shipments	188,363,540	$61,545,006
Port totals	592,577,485	$118,701,358
San Pedro		
Landings		
Pacific bonito	2,656,247	$245,107
White seabass	389,220	188,453
Jack mackerel	3,821,160	160,542
Spiny lobster	99,378	156,343
Rockfish	618,535	129,303
Green abalone	256,806	124,412
Bluefin tuna	568,534	122,346
Squid	4,255,000	91,927
Pink abalone	155,284	76,217
Rock crab	503,827	73,989
Swordfish	106,468	63,413
Yellowfin tuna	218,350	48,174
Pacific sardine	290,661	43,594
Pacific pompano	146,975	36,492
White abalone	57,541	33,154
Giant sea bass	87,131	26,526
Yellowtail	172,087	23,775
Albacore	59,440	20,272
Black abalone	121,433	19,972
Flyingfish	128,106	19,782
California halibut	40,069	19,632
White croaker	202,588	16,161
Northern anchovy	1,174,579	13,558
Shark	71,957	12,316
Red abalone	19,745	9,823
Black skipjack tuna	92,063	7,063
Smelt	96,521	4,916
Opaleye	15,082	3,905
California barracuda	9,144	3,278
Sculpin	4,871	2,002
Pacific mackerel	33,471	1,906
Perch	13,172	1,877
Halfmoon	5,914	1,453
Skipjack tuna	5,317	1,064
All other species	71,061	3,845
Port totals	16,567,737	$1,806,592

TABLE 20—Continued

Value of Landings and Shipments by Port, Los Angeles Area, 1972—Continued

	Pounds	Value
Wilmington		
Landings		
Jack mackerel	1,832,938	$77,009
Pacific bonito	423,662	39,094
Northern anchovy	2,515,914	29,041
Blacksmith	67,880	2,375
Spiny lobster	930	1,463
Black abalone	8,575	1,410
All other species	27,008	1,650
Total landings	4,876,907	$152,042
Shipments*		
Skipjack tuna	37,500	$9,238
Total shipments	37,500	$9,238
Port totals	4,914,407	$161,280
Dana Point		
Landings		
Spiny lobster	35,541	$55,914
Rockfish	6,553	1,544
All other species	2,787	736
Port totals	44,881	$58,194
Redondo Beach		
Landings		
Spiny lobster	23,133	$36,393
Rock crab	119,404	17,535
White seabass	3,618	1,752
Rockfish	8,474	1,750
All other species	2,767	665
Port totals	157,396	$58,095
Newport Beach		
Landings		
Spiny lobster	7,550	$11,878
White seabass	18,042	8,736
Albacore	24,519	8,362
Swordfish	13,702	8,161
Rockfish	25,337	6,045
All other species	11,066	1,873
Port totals	100,216	$45,055
Long Beach		
Landings		
Spiny lobster	2,455	$3,862
Northern anchovy	192,384	2,221
All other species	585	329
Port totals	195,424	$6,412
Malibu		
Landings		
Spiny lobster	1,457	$2,292
All other species	5,845	1,005
Port totals	7,302	$3,297
Avalon		
Landings		
All species	4,780	$2,688
Port totals	4,780	$2,688
Santa Monica		
Landings		
Rockfish	7,598	$1,257
All other species	2,983	1,163
Port totals	10,581	$2,420

TABLE 20—Continued

Value of Landings and Shipments by Port, Los Angeles Area, 1972—Continued

	Pounds	Value
Playa Del Rey		
Landings		
All species	2,996	$1,333
Port totals	2,996	$1,333
All other ports		
Spiny lobster	2,393	$3,765
Totals	2,393	$3,765
LOS ANGELES AREA TOTALS	**614,585,598**	**$120,850,489**

* Beginning in 1965 only tuna shipments are recorded.

TABLE 21

Value of Landings and Shipments by Port, San Diego Area, 1972

	Pounds	Value
San Diego		
Landings		
Yellowfin tuna	46,940,841	$10,376,089
Skipjack tuna	11,650,109	2,355,349
Bluefin tuna	9,337,320	1,967,421
Albacore	3,511,585	1,185,051
Pacific bonito	1,940,906	195,434
Spiny lobster	114,692	181,925
White seabass	265,103	140,587
Rockfish	522,844	117,188
Green abalone	161,224	87,909
Swordfish	108,131	66,911
Pink abalone	108,121	56,037
White abalone	86,123	52,483
Red abalone	107,103	52,189
Sculpin	126,667	45,203
Shark	87,100	19,315
Yellowtail	81,350	14,355
California halibut	20,821	11,734
Pacific sardine	45,700	11,279
Black skipjack tuna	116,366	8,727
Black abalone	32,269	7,444
Perch	22,467	5,922
Rock crab	19,053	3,007
Halfmoon	8,740	2,342
Giant sea bass	7,198	1,943
Dolphinfish	4,823	1,674
California barracuda	3,126	1,015
All other species	21,953	4,095
Total landings	75,451,735	$16,972,628
Shipments*		
Albacore	5,281,298	$2,137,082
Skipjack tuna	7,996,794	1,969,227
Yellowfin tuna	5,708,148	1,800,635
Bluefin tuna	51,404	10,846
Bigeye tuna	7,991	1,798
Black skipjack	11,265	845
Total shipments	19,056,900	$5,920,433
Port totals	94,508,635	$22,893,061
Oceanside		
Landings		
Spiny lobster	17,666	$28,022
Rockfish	95,139	21,395
White seabass	13,963	7,405
Shark	28,819	6,751
Halfmoon	12,468	3,341
Pacific bonito	28,987	2,919
Albacore	5,058	1,707
California halibut	2,345	1,322
All other species	15,027	3,419
Port totals	219,472	$76,281
All other ports		
Landings		
Spiny lobster	4,838	$7,674
All other species	4,898	1,147
Totals	9,736	$8,821
SAN DIEGO AREA TOTALS	**94,737,843**	**$22,978,163**

* Beginning in 1965 only tuna shipments are recorded.

TABLE 22

Statewide Commercial Partyboat Catch by Species
(Not including anchored barges)
1963–1972 *

Species	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Barracuda, California	483,699	303,070	443,304	892,697	470,480	372,246	358,518	373,801	50,474	38,243
Bass, kelp and sand	1,219,344	1,103,394	1,230,313	1,278,939	1,003,914	1,317,963	1,246,175	922,260	948,121	842,681
Bonito, Pacific	775,719	1,298,804	806,322	644,415	349,952	1,102,936	1,130,241	651,898	152,795	418,984
Cabezon	9,726	6,491	7,575	10,293	5,419	4,349	4,583	6,372	4,611	11,452
Halibut, California	125,669	141,465	118,213	88,726	63,582	54,663	27,634	29,968	10,598	8,140
Lingcod	27,513	25,263	33,260	44,676	43,559	42,449	32,693	61,833	63,239	103,965
Mackerel, jack	9,342	6,577	25,619	19,027	16,236	13,588	11,272	15,725	10,611	5,913
Mackerel, Pacific	146,560	101,219	151,896	205,090	108,366	78,933	120,036	129,770	224,223	245,882
Rockfish	962,659	966,801	1,347,430	1,688,718	1,894,057	2,102,859	1,978,981	2,663,882	2,222,943	3,054,959
Salmon	72,457	92,021	51,677	70,151	84,946	127,584	111,389	98,301	130,812	151,595
Sculpin	53,896	73,844	71,888	69,851	63,280	59,863	63,011	82,522	84,913	65,886
Seabass, white	19,800	14,901	9,775	3,972	3,385	4,138	4,056	4,359	5,265	3,858
Sheephead, California	18,443	26,822	41,651	52,967	42,676	33,075	49,626	39,464	38,300	33,541
Tuna, albacore	158,372	112,358	99,771	74,680	96,497	129,710	48,887	112,106	160,361	86,890
Tuna, bluefin	737	693	92	1,998	3,166	1,231	1,470	1,833	749	1,470
Whitefish, ocean	6,231	6,949	13,810	15,587	18,184	22,155	36,474	40,990	29,800	24,632
Yellowtail	45,705	39,104	18,367	80,163	31,392	58,049	79,202	97,376	44,608	59,031
All others	142,630	114,400	163,595	166,470	145,073	205,410	421,327	298,375	421,729	305,283
Total number of fish	**4,278,502**	**4,434,176**	**4,634,558**	**5,408,420**	**4,444,164**	**5,731,201**	**5,725,575**	**5,630,835**	**4,604,152**	**5,462,405**
Number of anglers	643,155	695,445	688,103	857,000	780,102	849,654	802,811	873,327	728,126	792,618

* See Fish Bulletin 121 for historical records 1936–1961.

TABLE 23

Inshore Bait Landings by Area
Pounds and Value
1972

Species	Sacramento	San Francisco and Monterey	Los Angeles	San Diego	Statewide*
Clam					
Freshwater	640,527	----	----	----	640,527
	$67,430	----	----	----	$67,430
Gaper	----	----	----	----	471
	----	----	----	----	$118
Jacknife	----	----	45,551	12,653	58,204
	----	----	$30,580	$7,612	$38,192
Purple	----	----	1,423	14,316	15,739
	----	----	$810	$6,919	$7,729
Unclassified	----	----	----	----	90
	----	----	----	----	$52
Crab					
Sand	----	----	6,786	28	6,814
	----	----	$20,770	$175	$20,945
Shore	----	----	25	----	26
	----	----	$5	----	$7
Crayfish	----	----	----	----	3,979
	----	----	----	----	$1,544
Killifish	----	----	----	----	11
	----	----	----	----	$32
Mudsucker, longjaw	----	----	----	223	6,511
	----	----	----	$88	$5,830
Mussel (bay and rock)	----	----	101,114	14,428	115,799
	----	----	$17,121	$2,024	$19,171
Sculpin, staghorn	702	185	----	----	887
	$2,297	$695	----	----	$2,992
Shrimp					
Bay	71,402	1,665	----	----	73,067
	$113,433	$2,423	----	----	$115,856
Brine	----	----	----	----	300,065
	----	----	----	----	$174,934
Ghost	----	----	15,672	5,882	21,554
	----	----	$35,718	$11,222	$46,940
Red	----	----	1,103	----	1,103
	----	----	$1,103	----	$1,103
Total	712,631	1,850	171,674	47,530	1,244,847
	$183,160	$3,118	$106,107	$28,040	$502,875

* Some figures are reported statewide only to avoid revealing the business of an individual in an area.

TABLE 24

Recorded Catch of Live Bait for Saltwater Sportfishing 1968–1972

Species	Thousands of pounds*				
	1968	1969	1970	1971	1972
Anchovy	14,353	10,627	12,210	12,774	11,700
Mackerel, jack	158	103	----	9	5
Mackerel, Pacific	----	8	----	1	----
Sardine, adult	57	34	----	----	T
Sardine, juvenile	----	----	6	T	T
Squid	23	9	----	10	----
Miscellaneous†	57	----	4	----	16
Total pounds	14,648	10,781	12,220	12,794	11,721
Number of Vessels‡	19	10	11	14	12

* Weights are estimated from voluntary records. They should be regarded as minimal because some fishermen do not supply catch information.
T Less than 500 pounds.
† Consists primarily of queenfish and white croaker.
‡ The number of live bait fishing vessels for which landings were reported. These numbers differ slightly from those in previous catch bulletins, since the earlier landing records, as submitted, sometimes included the catch of more than one boat.

TABLE 25

California Ocean Recreational Salmon Landings and Success [1] by Fishery, Port, Month and Species, in Numbers of Fish—1972

	February			March			April			May			June			July		
	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day
Crescent City																		
Partyboat	0	0	a	0	0	a	0	0	a	0	2	a	6	11	a	55	116	0.4
Skiff	--	--	a	--	--	a	--	--	a	--	--	a	185	541	0.4	318	2,928	0.6
Eureka																		
Partyboat	0	0	a	2	3	a	2	3	a	119	150	a	303	379	a	620	774	1.1
Skiff	--	--	a	--	--	a	--	--	a	--	--	a	966	3,258	0.5	3,083	11,418	0.9
Fort Bragg																		
Partyboat	0	0	a	4	4	a	26	27	a	260	260	a	437	437	a	1,113	1,659	1.2
Skiff	--	--	a	--	--	a	--	--	a	--	--	a	597	585	0.4	2,082	4,202	0.7
San Francisco																		
Partyboat	21,312	0	2.1	21,086	123	1.5	8,258	956	0.9	5,800	5,228*	1.8	15,340	469	1.5	19,274	61	1.5
Skiff	10,425	0	1.5	8,525	0	1.4	6,065	435	1.0	1,813	812	1.2	2,394	181	0.6	2,917	33	1.1
Monterey																		
Partyboat	221	0	b	108	8	b	152	11	b	241	17	b	190	13	b	98	7	b
Skiff	1,225	0	0.2	1,200	0	0.2	1,367	8	0.6	866	809	0.3	1,107	768	0.5	1,755	95	0.9
Statewide																		
Partyboat	21,533	0	2.1	21,200	138	1.5	8,438	997	0.9	6,420	5,657*	1.8	16,276	1,309	1.5	21,160	2,617	1.4
Skiff	11,650	0	0.9	9,725	0	0.8	7,432	443	0.9	2,679	1,621	0.6	5,249	5,333	0.5	10,155	18,676	0.8

	August			September			October			November			December			Season		
	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day	King	Silver	Fish /Day
Crescent City																		
Partyboat	33	74	0.4	3	1	0.2	0	0	[a]	0	0	[a]	0	0	[a]	97	204	0.4
Skiff	568	799	0.3	6	26	0.1	--	--	[a]	--	--	[a]	--	--	[a]	1,077	4,294	0.4
Eureka																		
Partyboat	142	627	0.8	26	116	[a]	3	14	[a]	0	1	[a]	0	0	[a]	1,217	2,067	1.0
Skiff	1,437	4,701	0.6	179	220	0.4	--	--	[a]	--	--	[a]	--	--	[a]	5,665	19,597	0.7
Fort Bragg																		
Partyboat	168	221	0.4	8	11	[a]	0	0	[a]	0	0	[a]	0	0	[a]	2,016	2,619	1.0
Skiff	169	736	0.3	10	10	0.1	--	--	[a]	--	--	[a]	--	--	[a]	2,858	5,533	0.6
San Francisco																		
Partyboat	19,100	28	1.7	17,361	0	1.6	7,439	18	0.9	515	0	0.4	0	0	[a]	135,485	6,883*	1.5
Skiff	3,929	21	1.0	2,838	12	1.1	1,600	0	1.2	512	13	1.0	0	0	[a]	41,018	1,507	1.1
Monterey																		
Partyboat	6	1	[b]	11	2	[b]	1	1	[a]	0	0	[a]	0	0	[a]	1,028	60	[b]
Skiff	998	27	0.6	1,043	57	0.8	400	25	0.2	100	0	0.2	0	0	[a]	10,061	1,789	0.4
Statewide																		
Partyboat	19,449	951	1.5	17,409	130	1.6	7,443	33	0.9	515	1	0.4	0	0	[a]	139,843	11,833*	1.5
Skiff	7,101	6,284	0.6	4,076	325	0.8	2,000	25	0.6	612	13	0.6	0	0	[a]	60,679	32,720	0.7

[1] Salmon per angler-day, species combined. [a] No sampling. [b] Data not comparable to that of other ports or months.
* Includes 18 pink salmon.

TABLE 26

California Commercial Troll Salmon Landings by Port-Area, Month and Species, in Pounds[1] and Numbers—1972

	April		May		June		July		August		September		Season	
	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers
Crescent City														
King	0	0	159,816	18,777	132,050	14,994	35,285	3,775	13,037	1,266	1,293	259	341,481	39,071
Silver	0	0	14,816	2,969	60,682	10,752	75,262	11,461	10,887	1,315	0	0	161,647	26,497
Pink	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eureka														
King	114	20	487,970	54,398	303,145	36,135	150,587	15,407	17,109	2,123	3,431	281	962,356	108,364
Silver	0	0	12,647	2,568	130,759	23,106	64,993	8,966	36,588	4,585	2,672	330	247,659	39,555
Pink	0	0	22	7	34	9	0	0	0	0	0	0	56	16
Fort Bragg														
King	0	0	274,036	30,145	316,077	28,839	510,277	43,572	121,524	10,808	20,119	1,608	1,242,033	114,972
Silver	0	0	23,100	4,394	87,271	14,483	263,006	34,901	37,372	4,563	3,161	424	413,910	58,765
Pink	0	0	0	0	14	4	0	0	0	0	0	0	14	4
San Francisco														
King	125	20	545,459	49,156	595,413	46,994	446,139	36,026	555,227	46,236	146,824	11,126	2,289,187	189,558
Silver	0	0	19,452	3,545	111,711	17,154	56,876	7,342	24,774	2,927	1,124	142	213,937	31,110
Pink	0	0	0	0	85	23	0	0	0	0	0	0	85	23
Monterey														
King	2,805	281	270,091	19,722	160,346	12,440	39,312	2,956	24,799	1,844	40,369	2,995	537,722	40,238
Silver	0	0	3,950	767	5,098	801	3,819	465	286	29	49	5	13,202	2,067
Pink	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Statewide														
King	3,044	321	1,737,372	172,198	1,507,031	139,402	1,181,600	101,736	731,696	62,277	212,036	16,269	5,372,779	492,203
Silver	0	0	73,965	14,243	395,521	66,296	463,956	63,135	109,907	13,419	7,006	901	1,050,355	157,994
Pink	0	0	22	7	133	36	0	0	0	0	0	0	155	43

[1] Dressed, head on.

APPENDIX I

Monthly Landings From Inland Waters During 1972

Species	January	February	March	April	May	June	July	August	September	October	November	December	Totals
LANDINGS													
Fish													
Blackfish, Sacramento	25,783	29,070	74,210	46,800	58,700	2,091	----	----	----	22,800	41,133	36,825	337,412
Carp	33,015	21,104	20,955	17,500	12,700	167	----	----	----	4,700	46,390	40,175	196,706
Lamprey	----	----	----	1,500	----	----	----	----	----	----	----	----	1,500
Crustacean													
Crayfish	106	58	101	110	42,646	12,186	590	6,330	7,975	553	669	1,484	72,808
Mollusk													
Snail, freshwater	----	----	----	----	----	----	----	----	----	----	85	327	412
Amphibia													
Frog	625	1,802	2,182	690	1,219	1,025	1,690	128	598	1,228	213	50	11,450
Total pounds	**59,529**	**52,034**	**97,448**	**66,600**	**115,265**	**15,469**	**2,280**	**6,458**	**8,573**	**29,281**	**88,490**	**78,861**	**620,288**

APPENDIX II

Value of Landings From Inland Waters by County During 1972

County and species	Pounds	Value
Alameda		
Crayfish	2,417	$1,984
Lamprey	1,500	450
Frog	6,410	4,048
County totals	10,327	$6,482
Contra Costa		
Blackfish, Sacramento	330,095	$66,019
Carp	190,415	15,449
County totals	520,510	$81,468
Lake		
Blackfish, Sacramento	3,181	$636
Carp	3,949	320
County totals	7,130	$956
Madera		
Crayfish	20	$9
Frog	1,282	963
County totals	1,302	$972
Merced		
Crayfish	661	$309
Frog	397	298
Snail, freshwater	85	17
County totals	1,143	$624
Sacramento		
Crayfish	65,258	$20,111
Frog	2,324	1,499
County totals	67,582	$21,610
San Diego		
Carp	475	$71
County totals	475	$71
San Joaquin		
Carp	60	$5
Crayfish	1,339	413
Frog	224	144
Snail, freshwater	327	53
County totals	1,950	$615
Solano		
Crayfish	3,113	$959
County totals	3,113	$959
Stanislaus		
Carp	1,807	$147
Blackfish, Sacramento	4,136	827
County totals	5,943	$974
Yuba		
Frog	813	$524
County totals	813	$524
Grand total	**620,288**	**$115,255**
Recap		
Blackfish, Sacramento	337,412	$67,482
Carp	196,706	15,992
Lamprey	1,500	450
Frog	11,450	7,476
Crayfish	72,808	23,785
Snail, freshwater	412	70
Grand total	**620,288**	**$115,255**

APPENDIX III
KELP HARVEST IN TONS

Year	Open Beds	Leased Beds	Total Tons
1916	134,537.00	----	134,537.00
1917	394,974.00	----	394,974.00
1918	395,098.00	----	395,098.00
1919	16,673.00	----	16,673.00
1920	25,464.00	----	25,464.00
•			
1931	----	260.00	260.00
1932	301.61	10,013.08	10,314.69
1933	52.75	21,568.65	21,621.40
1934	1,827.21	14,052.57	15,879.78
1935	----	30,601.83	30,601.83
1936	14,336.70	34,980.34	49,317.04
1937	9,612.70	34,340.65	43,953.35
1938	18,284.06	29,413.25	47,697.31
1939	25,546.30	31,189.70	56,736.00
1940	33,322.20	25,682.20	59,004.40
1941	36,103.00	19,614.00	55,717.00
1942	44,880.11	17,017.65	61,897.76
1943	19,547.44	28,410.86	47,958.30
1944	22,710.50	30,319.40	53,029.90
1945	37,541.30	21,639.90	59,181.20
1946	60,384.90	30,683.60	91,068.50
1947	46,028.80	28,207.80	74,236.60
1948	50,966.10	27,675.00	78,641.10
1949	56,076.00	27,270.00	83,346.00
1950	49,955.00	50,647.00	100,602.00
1951	30,318.00	84,442.00	114,760.00
1952	37,906.00	72,252.50	110,158.50
1953	37,172.50	89,476.50	126,649.00
1954	40,269.00	65,946.50	106,215.50
1955	38,992.00	85,071.00	124,063.00
1956	35,476.50	82,339.00	117,815.50
1957	32,810.75	61,396.50	94,207.25
1958	41,105.75	72,955.75	114,061.50
1959	42,289.65	47,309.45	89,599.10
1960	61,914.95	58,384.85	120,299.80
1961	71,952.70	57,303.30	129,256.00
1962	86,227.70	54,005.10	140,232.80
1963	57,517.00	63,514.80	121,031.80
1964	35,592.90	91,660.85	127,253.75
1965	33,464.10	101,664.90	135,129.00
1966	11,100.70	108,363.20	119,463.90
1967	9,331.00	122,164.00	131,495.00
1968	20,388.20	114,465.15	134,853.35
1969	10,028.70	121,210.50	131,239.20
1970	8,058.00	118,981.00	127,039.00
1971	19,476.00	136,083.00	155,559.00
1972	12,332.00	150,179.00	162,511.00

• No data available 1921–1930.

DESIGNATED COMMON NAMES OF CERTAIN MARINE ORGANISMS OF CALIFORNIA

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INTRODUCTION

Common names of the more important fishes have been designated by the California Department of Fish and Game for many years. The original purpose was to assist in collecting accurate catch statistics. For the Department to understand the State's many fisheries it is essential that the catch of each species be known. A consistent terminology on the part of both the commercial fishing industry and the sportsman is of great importance in the collection of catch records since confusion and inaccuracy result when a particular species is listed by different names in different parts of California or if a certain common name refers to any of several species.

In California as elsewhere in the world, common nomenclature of marine organisms did not grow up with the language as in Europe or Asia. The people who settled here naturally named things because of similarities—either real or apparent, superficial or significant—to familiar species in their homeland. As a result when California initiated its recording system for commercial landings in 1916, the need for more uniform terminology with respect to common names became readily evident. A chaotic situation existed with a given species being identified by different names in different parts of the state, in different fisheries, or even in adjacent fish markets, and a number of species being referred to by a single name.

The State Legislature enacted a law in 1919 to help bring some order to collecting records concerning California fisheries. This regulation stated:

> "The names used in the record for designating the variety of species of fish handled must be the name which is in common usage, and the Fish and Game Commission shall have the power to decide what is the common usage name of any variety."

In 1933, the law was amended to substantially its present form and its application limited to commercial varieties in connection with fish receipts. It now forms Section 8013 of Part 3 (Commercial Fishing), Article 6 (Commercial Fishing Reports), California Fish and Game Code, and reads:

> "The names used in the receipt for designating the species of fish dealt with shall be those in common usage, and may be designated by the Department."

Section 45 of General Provisions and Definitions in the Fish and Game Code states:

> "Fish means wild fish, mollusks, or crustaceans, invertebrates, or amphibians, including any part, spawn, or ova thereof."

While the present law specifically applies to commercial landings, the Department has designated common names to species taken by other than commercial fishermen in an effort to insure uniformity in State publications and records, and in an attempt to attain common usage on the part of all fishermen.

PRIOR LISTS

Walford (1931) prepared the first comprehensive list to establish official common names of California fishes which were handled commercially, or which were of particular interest to fishermen or dealers. The more important freshwater fishes, marine bony fishes, sharks and rays, marine mollusks, and marine and freshwater crustaceans were covered. Several of the names on this list were coined and not accepted by the public, others proved detrimental to marketing, and with the passage of time some of the scientific nomenclature changed. A revised official list was prepared by Roedel (1948), and reasons for name changes were set forth by the same author in 1949. Roedel prepared a revised and expanded official list of common names in 1953, and 9 years later authored a revised and enlarged version (Roedel 1962).

In 1950 Shapovalov and Dill assigned common names to all freshwater fishes of California. This list was revised and expanded in 1959 (Shapovalov, Dill, and Cordone).

Committees of the American Fisheries Society on Names of Fishes have prepared three lists of common and scientific names of fishes from the United States and Canada (Amer. Fish. Soc. 1948, 1960, 1970). These lists have been widely used and have contributed to eliminating confusion in fish nomenclature. As far as the common names of California's marine fishes are concerned, the great majority are in agreement with the 1970 list; however, a few names, both common and scientific, are in variance with those used in this state.

Other than the few invertebrate species covered by Walford (1931) in his list of official common names, there has been no previous attempt by the Department to designate common names for some of the more common California marine invertebrates.

PRESENT LIST

This list includes the names of quite a few species that have not appeared on previous lists of official names of California marine fishes. In fact an attempt is made to list all known shallow water marine and anadromous finfishes occurring within California waters. These include fishes found in an area between the Mexican and Oregon borders and offshore at least 50 miles. Miller and Lea (1972) provided the basic background as far as the species covered and the scientific nomenclature used for identifying these species. Selected species in representative invertebrate groups have been designated only for animals likely to be taken by sport and commercial fishermen, most apt to be seen by a casual visitor to the seashore, or that are representative of a particular group.

With respect to common names, several rules have governed their designation. These rules were directed toward the guiding principle that the purpose of the names is to assist in compiling accurate records as well as preparing comparable reports.

An ideal common name would be one that is in exclusive usage throughout the entire range of the species; however, relatively few names have such universal and select usage in the vernacular. It then becomes necessary to evaluate such common names as are applied to a species with regard to the following criteria:

1. Usage in California by both sportsmen and commercial fishermen, and the fishing industry.
2. Usage in other areas, particularly adjacent states.
3. Usage on other common name lists.
4. Connotations that may have an undesirable effect upon market ability.
5. The name should be brief and descriptive.
6. The name should indicate rather than confuse relationships.
7. Is generally accepted by most California workers in the field of taxonomy.

While most of the designated names meet the majority of the above criteria, there are some exceptions. In these cases, the overriding criterion was the firm implantation of the name in the vernacular. Some of these names are misleading, are not accepted on other lists, are not necessarily descriptive, but in general are acceptable to California taxonomists.

When a common name on the present list deviates from either Roedel (1962) or the American Fisheries Society (1970), an annotated explanation is given. Not all changes in scientific nomenclature are annotated; however, Miller and Lea (1972) present detailed reasons for certain taxonomic positions.

Unlike previous lists which list the official common name and the scientific designation, this list presents a third column which details other common names by which the species is or has been known. This listing should facilitate the identification of species referred to in the literature and records.

The order in which the jawless fish (agnaths) and the sharks and rays (cartilaginous fishes) are presented generally follows that of the American Fisheries Society (1970).

The list of bony fish (teleosts) families is arranged in the sequence of Greenwood et al (1966), with the species in each family alphabetized to generic and specific names. The class, order, and family sequence for mollusks follows the arrangement of Keen (1963), while the family arrangement of the arthropod order Decapoda follows Schmitt (1921).

VERTEBRATA

CLASS AGNATHA—JAWLESS FISHES

ORDER MYXINIFORMES

Myxinidae—hagfishes

Designated common name	Scientific name	Other common names
Black hagfish	*Eptatretus deani* (Evermann and Goldsborough)	California hagfish, lamperina
Pacific hagfish	*Eptatretus stoutii* (Lockington)	
Whiteface hagfish*	*Myxine circifrons* Garman	

ORDER PETROMYZONTIFORMES

Petromyzonidae—lampreys

Western river lamprey*	*Lampetra ayresii* (Gunther)	Western brook lamprey, river lamprey, western lamprey
Pacific lamprey*	*Lampetra tridentata* (Gairdner)	Eel, river eel, three-toothed lamprey, western lamprey

This species appears as western brook lamprey in AFS (1970); however, we apply the term river since it seems more descriptive of the animals' habitat.

CLASS CHONDRICHTHYES—CARTILAGINOUS FISHES

ORDER CHLAMYDOSELACHIFORMES

Chlamydoselachidae—frill sharks

Frilled shark	*Chlamydoselachus anguineus* Garman	Frill shark

ORDER HEXANCHIFORMES

Hexanchidae—cow sharks

Sixgill shark	*Hexanchus griseus* (Bonnaterre)	Shovelnosed shark, cow shark, mud shark, sixgill cowshark, griset, caffa bota
Sevengill shark	*Notorynchus maculatus* Ayres	Cowshark, mud shark, spotted cowshark, sevengill cowshark, Pacific sevengill cowshark

ORDER HETERODONTIFORMES

Heterodontidae—bullhead sharks

Horn shark	*Heterodontus francisci* (Girard)	Port Jackson shark, bullhead shark, horned shark, California horn shark

AFS (1970) changed the common family name from horn sharks since family is widely known as bullhead sharks; we concur.

ORDER SQUALIFORMES

Rhinocodontidae—whale shark

Whale shark	*Rhincodon typus* Smith	Mhor, chagrin, tiburon ballenas, tint reva

Alopiidae—thresher sharks

Bigeye thresher*	*Alopias superciliosus* (Lowe)	Thresher, longtail shark, thresher shark, fish shark, sea ope, pez zorro, pesca pavone, swiveltail, fox shark, swingtail, sea fox
Common thresher	*Alopias vulpinus* (Bonnaterre)	

With the addition of the bigeye thresher to California, we follow Bigelow and Schroeder (1948) and add the attributive "common" to the name for *A. vulpinus*.

Odontaspididae—sand tigers

Ragged-tooth shark*	*Odontaspis ferox* (Risso)	

Lamnidae-mackerel sharks

White shark	*Carcharodon carcharias* (Linnaeus)	Maneater shark, great white shark
Bonito shark	*Isurus oxyrinchus* Rafinesque	Mackerel shark, spriglio, paloma, shortfin mako, mako
Shortfin mako in AFS (1970). We follow Miller and Lea (1972) and retain the name bonito shark.		
Salmon shark	*Lamna ditropis* Hubbs and Follett	Porbeagle, mackerel shark, tiger shark

Cetorhinidae—basking shark

Basking shark	*Cetorhinius maximus* (Gunnerus)	Elephant shark, bone shark, sailfish, sunfish, pelerin, hoe-mother, capidoli, oilfish, oil shark, ground shark

We follow Bigelow and Schroeder (1948) in placing this species in the family Cetorhinidae. Roedel (1962) and AFS (1970) include the basking shark in the family Lamnidae.

Scyliorhinidae—cat sharks

Brown cat shark	*Apristurus brunneus* (Gilbert)	Brown shark
Longnose cat shark*	*Apristurus kampae*	
Swell shark	*Cephaloscyllium ventriosum* (Garman)	California swell shark
We follow Kato, Springer, and Wagner (1967) and regard *C. uter* a synonym of *C. ventriosum*.		
Filetail cat shark	*Parmaturus xaniurus* (Gilbert)	Filetail shark

Carcharhinidae—requiem sharks

Bull shark	*Carcharhinus leucas* (Valenciennes)	Roundnose shark, pigeye shark
Referred to as the roundnose shark, *Carcharhinus azureus*, by Roedel (1962); we follow Kato, Springer, and Wagner (1967).		
Pelagic whitetipped shark*	*Carcharhinus longimanus* (Poey)	Oceanic whitetip shark
Dusky shark	*Carcharhinus obscurus* (Lesueur)	Bay shark, bay grayshark, injerto
Referred to as the bay shark, *Carcharhinus lamiella*, by Roedel (1962); we follow Kato, Springer, and Wagner (1967).		
Narrowtooth shark*	*Carcharhinus remotus* (Dumeril)	
Tiger shark	*Galeocerdo cuvier* (Peron and Lesueur)	Spotted shark, tigrone
Soupfin shark	*Galeorhinus zyopterus* Jordan and Gilbert	Oil shark, soupfin, tope
Gray smoothhound	*Mustelus californicus* Gill	Mud shark, dogfish, paloma, sand shark, gray shark
Brown smoothhound	*Mustelus henlei* (Gill)	Mud shark, dogfish, paloma, sand shark, Henle's shark
Sicklefin smoothhound	*Mustelus lunulatus* Jordan and Gilbert	Dog shark, gato, smoothhound
Blue shark	*Prionace glauca* (Linnaeus)	Great blue shark
Pacific sharpnose shark	*Rhizoprionodon longurio* (Jordan and Gilbert)	Sharpnose shark
Leopard shark	*Triakis semifasciata* Girard	Cat shark

Sphyrnidae—hammerhead sharks

Scalloped hammerhead	*Sphyrna lewini* (Griffith)	
Bonnethead	*Sphyrna tiburo* (Linnaeus)	Pacific bonnethead, shovelhead shark
Smooth hammerhead	*Sphyrna zygaena* (Linnaeus)	Hammerhead shark, common hammerhead, axhead shark, shovelnose shark

Squalidae—dogfish sharks

Pygmy shark*	*Euprotomicrus bispinatus*	Slim shark
Prickly shark	*Echinorhinus cookei* Pietschmann	Bramble shark
Pacific sleeper shark	*Somniosus pacificus* Bigelow and Schroeder	Sleeper shark, nurse shark
Spiny dogfish	*Squalus acanthias* Linnaeus	Dog shark, dogfish, grayfish, Pacific grayfish, spinarola, Pacific dogfish, California dogfish

Squatinidae—angel sharks

Pacific angel shark	*Squatina californica* Ayres	California angel shark, angel shark, monkfish, northern angel shark, squat, squato

* Not listed in Roedel, 1962.

ORDER RAJIFORMES

Rhinobatidae—guitarfishes

Designated common name	Scientific name	Other common names
Thornback	*Platyrhinoidis triseriata* (Jordan and Gilbert)	Round skate, thornback, guitarfish, California thornback, shovelnose
Shovelnose guitarfish	*Rhinobatos productus* (Ayres)	Shovelnosed shark, pointed nosed guitarfish, guitarfish
Banded guitarfish	*Zapteryx exasperata* (Jordan and Gilbert)	Striped guitarfish, mottled guitarfish

Torpedinidae—electric rays

Pacific electric ray	*Torpedo californica* Ayres	California electric ray, electric ray, torpedo fish, California torpedo, crampfish, torpedo

Rajidae—skates

Deepsea skate*	*Raja abyssicola* Gilbert	Abyssal skate
Big skate	*Raja binoculata* Girard	Big skate of California
California skate	*Raja inornata* Jordan and Gilbert	Common skate
Sandpaper skate	*Raja kincaidii* Garman	Black skate
Black skate in AFS (1970). We follow Miller and Lea (1972) in using the common name sandpaper skate for *Raja kincaidii* since this species is never black and has a uniformly rough denticulated dorsal surface. Black skate is designated for *Raja trachura* because this is the only black colored California skate.		
Longnose skate	*Raja rhina* Jordan and Gilbert	Longnosed skate, California longnose skate
Starry skate	*Raja stellulata* Jordan and Gilbert	Prickly skate, cheap skate
Black skate	*Raja trachura* Gilbert	Monterey skate, rock skate, roughtail skate
Roughtail skate in AFS (1970). See comment under sandpaper skate.		
White skate*	*Bathyraja spinosissima* (Beebe and Tee-Van)	

Dasyatididae—stingrays

Diamond stingray	*Dasyatis dipterura* (Jordan and Gilbert)	Pacific stingray, rat-tailed stingray, stingaree
Pelagic stingray	*Dasyatis violacea* (Bonaparte)	
Round stingray	*Urolophus halleri* Cooper	Stingaree, stingray

Gymnuridae—butterfly rays

California butterfly ray	*Gymnura marmorata* (Cooper)	Butterfly stingray, stingaree, butterfly ray, angel shark, bay ray, eagle sting ray

Myliobatidae—eagle rays

Bat ray	*Myliobatis californica* Gill	Eagle ray, California sting ray, stingaree, bat sting ray, batfish

Mobulidae—mantas

Pacific manta	*Manta hamiltoni* (Newmann)	Manta, devilfish, sea devil, blanketfish
Spinetail mobula	*Mobula japanica* (Muller and Henle)	
Smoothtail mobula	*Mobula lucasana* Beebe and Tee-Van	Mobula, Pacific mobula

ORDER CHAMAERIFORMES

Chimaeridae—chimaeras

Ratfish	*Hydrolagus colliei* (Lay and Bennett)	Chimaera, elephantfish, rattail, rabbitfish, goatfish, king-of-the-herrings, water hare

ORDER ACIPENSERIFORMES

Acipenseridae—sturgens

Green sturgeon	*Acipenser medirostris* Ayres	
White sturgeon	*Acipenser transmontanus* Richardson	Sacramento sturgeon, Oregon sturgeon

ORDER ELOPIFORMES

Albulidae—bonefishes

Bonefish	*Albula vulpes* (Linnaeus)	Ladyfish, bananafish, sanducha, macabi, mullet, silver shuttle

ORDER ANGUILLIFORMES

Muraenidae—morays

California moray	*Gymnothorax mordax* (Ayres)	Moray, moray eel, eel, conger eel, marina, muraena

Congridae—conger eels

Catalina conger*	*Gnathophis catalinensis* (Wade)	

Ophichthidae—snake eels

Pacific worm eel*	*Myrophis vafer* Jordan and Gilbert	
Spotted snake eel*	*Ophichthus triserialis* (Kaup)	Pacific snake eel
Yellow snake eel*	*Ophichthus zophochir* (Jordan and Gilbert)	

Nemichthyidae—snipe eel

Slender snipe eel*	*Nemichthys scolopaceus* Richardson	

ORDER CLUPEIFORMES

Clupeidae—herrings

American shad	*Alosa sapidissima* (Wilson)	Shad, common shad
Pacific herring	*Clupea harengus pallasii* Linnaeus	Herring, California herring
Threadfin shad	*Dorosoma petenense* (Gunther)	
Round herring	*Etrumeus teres* (DeKay)	California round herring, Pacific round herring, Japanese herring

Roedel (1962) listed *Etrumeus acumintus* as Pacific round herring; however, *E. acumintus* is now considered synonymous with *Etrumeus teres*, a species with a worldwide distribution in warmer seas. We drop the attributive "Pacific" since it now is inappropriate.

Flatiron herring	*Harengula thrissina* (Jordan and Gilbert)	
Middling thread herring	*Opisthonema medirastre* Berry and Barrett	Pacific thread herring

Roedel (1962) listed Pacific thread herring, *Opisthonema libertate*; however, this species has been subsequently divided into three species, only one of which, the middling thread herring, *Opisthonema mediraste*, occurs in California waters.

Pacific sardine	*Sardinops sagax caeruleus* (Jenyns)	California sardine, pilchard, sardina, young called firecrackers

AFS list this species as *Sardinops sagax*, but we follow Miller and Lea (1972) and retain the subspecies designation of *caeruleus*.

Engraulididae—anchovies

Deepbody anchovy	*Anchoa compressa* (Girard)	Deep-bodied anchovy, sprat, sardinus, California deepbody anchovy
Slough anchovy	*Anchoa delicatissima* (Girard)	Southern anchovy
Slim anchovy*	*Anchoviella miarcha* (Jordan and Gilbert)	
Anchoveta	*Cetengraulis mysticetus* (Gunther)	
Northern anchovy	*Engraulis mordax* Girard	California anchovy, anchovy, plain anchovy, young called pinheads

* Not listed in Roedel, 1962.

ORDER SALMONIFORMES

Salmonidae—trouts and salmon

Designated common name	Scientific name	Other common names
Pink salmon	*Oncorhynchus gorbuscha* (Walbaum)	Humpback salmon, lost salmon, dog salmon, haddo, holia, gorbuscha
Chum salmon	*Oncorhynchus keta* (Walbaum)	Calico salmon, dog salmon, keta, lekai salmon, hayho
Silver salmon	*Oncorhynchus kisutch* (Walbaum)	Silversides, coho salmon, dog salmon, hookbill, medium red salmon, tschaviche, jack salmon, hooped, kisutch, showitz, quisutsch, bielaya ryba
Coho salmon in AFS (1970). We follow Roedel (1962) since the term "silver salmon" is so deeply ingrained in the laws of California and in the vernacular of the fishermen.		
Sockeye salmon*	*Oncorhynchus nerka* (Walbaum)	Kokanee, Fraser River salmon, nerka, sukkegh salmon, blueback salmon, red salmon, redfish, sawqui salmon, Krasnaya ryba, benimasu
King salmon	*Oncorhynchus tshawytscha* (Walbaum)	Chinook salmon, Sacramento River salmon, quinnat salmon, spring salmon, tyree salmon, black salmon, Columbia River salmon, tchaviche, tshawytscha
AFS (1970) lists "chinook"; however, we retain "king" as the designated name since it is so deeply ingrained in the laws of California. Both names are widespread in the vernacular of the fishermen.		
Cutthroat trout	*Salmo clarkii* Richardson	Blackspotted trout, coastal cutthroat trout, blueback, sea trout
Rainbow trout (Steelhead)	*Salmo gairdnerii* Richardson	Steelhead (a sea-run rainbow trout), steelhead trout, salmon trout, half-pounder, hardhead, summer salmon

Osmeridae—smelts

Whitebait smelt	*Allosmerus elongatus* (Ayres)	Frittura, small fry, perlin
Surf smelt	*Hypomesus pretiosus* (Girard)	Surf fish, nightfish, perlin, silver smelt, dayfish
Delta smelt*	*Hypomesus transpacificus* McAllister	
Night smelt	*Spirinchus starksi* (Fisk)	Whitebait, sand smelt, nightfish
Longfin smelt	*Spirinchus thaleichthys* (Ayres)	Sacramento smelt, delta smelt
Roedel (1962) listed this species as Sacramento smelt. We follow AFS (1970) and use longfin smelt.		
Eulachon	*Thaleichthys pacificus* (Richardson)	Candlefish, ulchen

Argentinidae—argentines

Pacific argentine	*Argentina sialis* Gilbert	

Bathylagidae—deepsea smelts

Robust blacksmelt*	*Bathylagus milleri* Jordan and Gilbert	Stout blacksmelt
Popeye blacksmelt*	*Bathylagus ochotensis* Schmidt	Eared blacksmelt
Pacific blacksmelt*	*Bathylagus pacificus* Gilbert	Slender blacksmelt
Snubnose blacksmelt*	*Bathylagus wesethi* Bolin	Southern blacksmelt
California smoothtongue*	*Leuroglossus stilbius* Gilbert	Smoothtongue, northern smoothtongue

Opisthoproctidae—spookfishes

Pacific barreleye*	*Macropinna microstoma* Chapman	Barreleye
Barreleye in AFS (1970). We follow Miller and Lea (1972) and add the attributive "Pacific".		

Gonostomatidae—lightfishes

Benttooth bristlemouth*	*Cyclothone acclinidens* Garman	
Bigeye lightfish*	*Danaphos oculatus* (Garman)	

Sternoptychidae—hatchetfishes

Slender hatchetfish*	*Argyropelecus affinis* Garman	
Spurred hatchetfish*	*Argyropelecus hemigymnus* Cocco	
Silver hatchetfish*	*Argyropelecus lychnus* Garman	Silvery hatchfish
Silvery hatchetfish*	*Argyropelecus sladeni* Regan	

Melanostomiatidae—dragonfishes

Highfin dragonfish*	*Bathophilus flemingi* Aron and McCrery	
Longfin dragonfish*	*Tactostoma macropus* Bolin	Arrow dragonfish

Chauliodontidae—viperfishes

Pacific viperfish*	*Chauliodus macouni* Bean	Fanged viperfish

Synodontidae—lizardfishes

California lizardfish	*Synodus lucioceps* (Ayres)	Candlefish, lizardfish

Paralepididae—barracudina

Slender barracudina*	*Lestidium ringens* (Jordan and Gilbert)	

Alepisauridae—lancetfish

Longnose lancetfish	*Alepisaurus ferox* Lowe	Handsaw fish, Pacific lancetfish, wolffish, subotka

Pacific lancetfish, *Alepisaurus richardsoni*, listed by Roedel (1962) is now considered synonymous with *A. ferox*.

Anotopteridae—daggertooth

Daggertooth*	*Anotopterus pharao* Zugmayer	

Scopelarchidae—pearleyes

Northern pearleye*	*Benthalbella dentata* (Chapman)	Pearleye

Myctophidae—lanternfishes

California headlightfish*	*Diaphus theta* Eigenmann and Eigenmann	Theta lanternfish, whitespotted lanternfish, headlightfish
Broadfin lampfish*	*Lampanyctus ritteri* Gilbert	Broadfin lanternfish
California flashlightfish*	*Protomyctophum crockeri* (Bolin)	Flashlightfish
Northern lampfish*	*Stenobrachius leucopsarus* (Eigenmann and Eigenmann)	Smallfin lanternfish
California lanternfish*	*Symbolophorus californiensis* (Eigenmann and Eigenmann)	
Blue lanternfish*	*Tarltonbeania crenularis* (Jordan and Gilbert)	
Mexican lampfish*	*Triphoturus mexicanus* (Gilbert)	

ORDER SILURIFORMES

Ariidae—sea catfish

Chihuil*	*Bagre panamensis* (Gill)	

ORDER BATRACHOIDFORMES

Batrachoididae—toadfishes

Specklefin midshipman	*Porichthys myriaster* Hubbs and Schultz	Slim midshipman, bullhead, singing fish, toad fish
Plainfin midshipman	*Porichthys notatus* Girard	Northern midshipman, bullhead, singing fish, toad fish, grunter

We designate these more descriptive names as proposed by Roedel (1962).

* Not listed in Roedel, 1962.

ORDER GOBIESOCIFORMES

Gobiesocidae—clingfishes

Designated common name	Scientific name	Other common names
Lined clingfish*	*Gobiesox eugrammus* Briggs	
Northern clingfish*	*Gobiesox maeandricus* (Girard)	Common clingfish, flathead clingfish, suckfish
Bearded clingfish*	*Gobiesox papillifer* Gilbert	
California clingfish*	*Gobiesox rhessodon* Smith	
Southern clingfish*	*Rimicola dimorpha* Briggs	
Slender clingfish*	*Rimicola eigenmanni* (Gilbert)	
Kelp clingfish*	*Rimicola muscarum* (Meek and Pierson)	

ORDER LOPHIFORMES

Antennariidae—frogfishes

Roughjaw frogfish*	*Antennarius avalonis* Jordan and Starks	Frogfish, California frogfish

Ogcocephalidae—batfishes

Spotted batfish*	*Zalieutes elator* (Jordan and Gilbert)	Batfish

Ceratiidae—seadevils

Warted seadevil*	*Cryptopsaras couesii* Gill	Triplewart seadevil

ORDER GADIFORMES

Moridae—codlings

Finescale codling*	*Antimora microlepis* Bean	Finescale flatnose codling, Pacific flatnose, longfin cod
Hundred-fathom codling*	*Physiculus rastrelliger* Gilbert	

Gadidae—codfishes

Pacific cod	*Gadus macrocephalus* Tilesius	Plain cod, gray cod, true cod, Alaska cod, cod
Pacific tomcod	*Microgadus proximus* (Girard)	Tomcod, piciata, California tomcod
Walleye pollock*	*Theragra chalcogramma* (Pallas)	Whiting, bigeye, Alaska pollock, southern walleye pollock

Merlucciidae—hakes

Pacific hake	*Merluccius productus* (Ayres)	Hake, white fish, haddock, butterfish, mellusa, meluzette, California hake, ocean whitefish, popeye, silver hake

Ophidiidae—cusk-eels

Spotted cusk-eel*	*Chilara taylori* (Girard)	
Basketweave cusk-eel*	*Otophidium scrippsi* Hubbs	California cusk-eel

Brotulidae—brotulas

Red brotula*	*Brosmophycis marginata* (Ayres)	
Purple brotula*	*Oligopus diagrammus* (Heller and Snodgrass)	

Zoarcidae—eelpouts

Bigfin eelpout*	*Aprodon corteziamus* Gilbert	Smoothgum eelpout
Twoline eelpout*	*Bothrocara brunneum* (Bean)	

Soft eelpout*	*Bothrocara molle* Bean	Pighead eelpout
Flatcheek eelpout*	*Embryx crotalina* (Gilbert)	Snakehead eelpout
Blackmouth eelpout*	*Lycodapus fierasfer* Gilbert	Pearly eelpout
Pallid eelpout*	*Lycodapus mandibularis* Gilbert	Pale eelpout
Black eelpout*	*Lycodes diapterus* Gilbert	Blackfinned eelpout
Blackbelly eelpout*	*Lycodopsis pacifica* (Collett)	
Bearded eelpout*	*Lyconema barbatum* Gilbert	
Midwater eelpout*	*Melanostigma pammelas* Gilbert	Pacific softpout, black eelpout

Macrouridae—grenadiers

Pacific grenadier*	*Coryphaenoides acrolepis* (Bean)	Pacific rattail, roughscale rattail, rhoughscale grenadier
California grenadier*	*Nezumia stelgidolepis* (Gilbert)	California rattail

We apply the AFS (1970) common family designation to the common name of the species. The term rattail was used by Miller and Lea (1972).

ORDER ATHERINIFORMES

Exocoetidae—flyingfishes

California flyingfish	*Cypselurus californicus* (Cooper)	Volator, great flyingfish
Blotchwing flyingfish*	*Cypselurus heterurus* (Rafinesque)	Single-bearded flyingfish
Sharpchin flyingfish	*Fodiator acutus* (Valenciennes)	Sharpnose flyingfish
Blackwing flyingfish*	*Hirundichthys rondeletii* (Valenciennes)	

Hemiramphidae—halfbeaks

Ribbon halfbeak*	*Euleptorhamphus longirostris* (Cuvier)	
Longfin halfbeak*	*Hemiramphus saltator* Gilbert and Starks	
California halfbeak*	*Hyporhamphus rosae* (Jordan and Gilbert)	Halfbeak
Silverstripe halfbeak*	*Hyporhamphus unifasciatus* (Ranzani)	Halfbeak, common halfbeak, escribano, pajarito

Halfbeak in AFS (1970). We follow Miller and Lea (1972) and add the attributive "silverstripe" since three other halfbeaks occur in California waters.

Belonidae—needlefishes

California needlefish	*Strongylura exilis* (Girard)	Garfish, billfish, needlefish, California garfish

Scomberesocidae—sauries

Pacific saury	*Cololabis saira* (Brevoort)	Skipper, garfish, sourbelly, sourfish, saury

Cyprinodontidae—killifishes

California killifish	*Fundulus parvipinnis* Girard	Killifish

Atherinidae—silversides

Topsmelt	*Atherinops affinis* (Ayres)	Bay smelt, rainbow smelt, panzarotto, little smelt, least smelt, silverside, capron, jack, pescadillo
Jacksmelt	*Atherinopsis californiensis* Girard	Silverside, California smelt, horse smelt, blue smelt, pescado del rey, Peixe rey, Pesce rey
California grunion	*Leuresthes tenuis* (Ayres)	Smelt, little smelt, least smelt, grunion

* Not listed in Roedel, 1962.

ORDER BERYCIFORMES

Melamphaidae—bigscales

Designated common name	Scientific name	Other common names
Crested bigscale*	*Poromitra crassiceps* (Gunther)	
Twospine bigscale*	*Scopelogadus mizolepis* (Gilbert)	

ORDER ZEIFORMES

Zeidae—dories

Mirror dory*	*Zenopsis nebulosa* (Temminck and Schlegel)	

Oreosomatidae—oreos

Oxeye oreo*	*Allocyttus verrucosus* (Gilchrist)	Coster dory, oreo

ORDER LAMPRIDIFORMES

Lamprididae—opahs

Opah	*Lampris regius* (Bonnaterre)	Poisson lune, moonfish

Lophotidae—crestfishes

Highbrow crestfish*	*Lophotus cristatus* Johnson	Crestfish, oarfish, sea serpent

Trachipteridae—ribbonfishes

Polkadot ribbonfish	*Desmodema polysticta* (Ogilby)	
King-of-the-salmon	*Trachipterus altivelis* Kner	California ribbonfish
Tapertail ribbonfish*	*Trachipterus fukuzakii* Fitch	
Scalloped ribbonfish*	*Zu cristatus* (Bonelli)	

Regalecidae—oarfishes

Oarfish*	*Regalecus glesne* (Ascanius)	King-of-the-herrings

ORDER GASTEROSTEIFORMES

Gasterosteidae—sticklebacks

Tubesnout	*Aulorhynchus flavidus* Gill	
Threespine stickleback	*Gasterosteus aculeatus* Linnaeus	Common stickleback

Centriscidae—snipefishes

Slender snipefish*	*Macrorhamphosus gracilis* (Lowe)	Snipefish

Syngnathidae—seahorse and pipefishes

Pacific seahorse*	*Hippocampus ingens* Girard	Caballito del mar
Snubnose pipefish*	*Syngnathus arctus* (Jenkins and Evermann)	
Barred pipefish*	*Syngnathus auliscus* (Swain)	
Kelp pipefish	*Syngnathus californiensis* Storer	Great pipefish
Bay pipefish	*Syngnathus leptorhynchus* Girard	

This species is conspecific with *Syngnathus griseolineatus* listed by Roedel (1962).

ORDER SCORPAENIFORMES

Scorpaenidae—scorpionfishes

Sculpin	*Scorpaena guttata* Girard	California scorpionfish, spotted scorpionfish, scorpionfish, scorpion, bullhead, scorpene

AFS (1970) uses "California scorpionfish." We follow Roedel (1962) and designate the name "sculpin" since it is so firmly implanted in the vernacular of both sport and commercial fishermen.

Rainbow scorpionfish*	*Scorpaenodes xyris* (Jordan and Gilbert)	

Members of the genus *Sebastes* have been referred to as rockfish or rockcod since the mid-1800's. We feel rockfish is the more appropriate name so we follow AFS (1970) and Roedel (1962). We do not list the term rockcod as another common name; however, all the species in this genus have been referred to as rockcod.

Rougheye rockfish	*Sebastes aleutianus* (Jordan and Evermann)	Blackthroated rockfish, blacktip rockfish
Pacific ocean perch	*Sebastes alutus* (Gilbert)	Longjaw rockfish, rose fish
Kelp rockfish	*Sebastes atrovirens* (Jordan and Gilbert)	Gopher rockfish, garrupa, green garrupa
Brown rockfish	*Sebastes auriculatus* Girard	Blina, sand bass
Aurora rockfish	*Sebastes aurora* (Gilbert)	
Redbanded rockfish*	*Sebastes babcocki* (Thompson)	
Shortraker rockfish*	*Sebastes borealis* Barsukov	
Silvergray rockfish	*Sebastes brevispinis* (Bean)	Shortspine rockfish
Gopher rockfish	*Sebastes carnatus* (Jordan and Gilbert)	Flesh-colored rockfish, flesh-colored garrupa, butterball, butter bass
Copper rockfish	*Sebastes caurinus* Richardson	Whitebelly rockfish, white gopher, barriga, gopher, blanca, palermotano, northern rockfish
Greenspotted rockfish	*Sebastes chlorostictus* (Jordan and Gilbert)	Chucklehead, Santa Maria, red rock cod, bolina, cernie, pesce vermiglia, chinafish
Black-and-yellow rockfish	*Sebastes chrysomelas* (Jordan and Gilbert)	Gopher rockfish, black and yellow garrupa, cifulatano, sand bass
Starry rockfish	*Sebastes constellatus* (Jordan and Gilbert)	Spotted corsair, spotted rockfish, chinafish, red rock cod, scacciatale
Darkblotched rockfish	*Sebastes crameri* (Jordan)	Blackmouth rockfish, blackblotched rockfish
Calico rockfish	*Sebastes dalli* (Eigenmann and Beeson)	Pretty rock cod, brown rockfish
Splitnose rockfish	*Sebastes diploproa* (Gilbert)	Rosefish, lobe-jawed rockfish
Greenstriped rockfish	*Sebastes elongatus* Ayres	Red rock cod, strawberry rockfish, serena, reina, poinsetta, striped rockfish
Swordspine rockfish*	*Sebastes ensifer* Chen	Flyfish

This species was listed as *Sebastodes rhodochloris* by Roedel (1962). Chen (1971) synonymized *S. rhodochloris* with *S. helvomaculatus* and described *S. ensifer*.

Widow rockfish	*Sebastes entomelas* (Jordan and Gilbert)	Red snapper,† viuva, widowfish, beccafico
Pink rockfish	*Sebastes eos* (Eigenmann and Eigenmann)	Chucklehead, dawn rockfish, Santa Maria
Yellowtail rockfish	*Sebastes flavidus* (Ayres)	Red snapper,† rock cod, yellowtail, gialota, giola, cherne, green snapper
Bronzespotted rockfish	*Sebastes gilli* (Eigenmann)	Catalina, Catalina bass, Catalina salmon
Chilipepper	*Sebastes goodei* (Eigenmann and Eigenmann)	Red snapper,† red rock cod, johnnies, johnny cod
Rosethorn rockfish	*Sebastes helvomaculatus* Ayres	Deep-water scacciatale, deep-water scratch-tail, orange-red rockfish
Squarespot rockfish	*Sebastes hopkinsi* (Cramer)	Smallmouth rockfish, widow rock cod
Shortbelly rockfish	*Sebastes jordani* (Gilbert)	Slim rockfish, slender rockfish, steamer rockfish
Freckled rockfish	*Sebastes lentiginosus* Chen	
Cowcod	*Sebastes levis* (Eigenmann and Eigenmann)	Red snapper,† cow rockfish, roosterfish, gallo, chefra, cowfish, cow

Roedel (1962) and AFS assigned the common name cow rockfish to this species; however, we follow Miller and Lea (1972) since the term cowcod is so firmly implanted in the vernacular of both sport and commercial fishermen.

Mexican rockfish	*Sebastes macdonaldi* (Eigenmann and Beeson)	Black-and-red rockfish, dark-chili, coral-red rockfish

* Not listed in Roedel, 1962.

† These species of rockfish have been marketed in the filleted condition as red snapper since the late 1800s. Since the true red snapper, *Lutjanus campechanus* (Poey), belongs to the family Lutjanidae which is not represented on the Pacific coast of the United States, and since the name "red snapper" is firmly implanted in the vernacular of the commercial fishermen, we suggest the term "Pacific red snapper" be used when marketing these species in a filleted condition. On March 8, 1974, the California Fish and Game Commission adopted Section 103, Title 14, California Administrative Code, which states the term Pacific red snapper may be used as an alternate common name for these species.

Scorpaenidae—scorpionfishes—Continued

Designated common name	Scientific name	Other common names
Quillback rockfish	*Sebastes maliger* (Jordan and Gilbert)	Orange-spotted rockfish, yellow-backed rockfish, brown rockfish, speckled rockfish
Black rockfish	*Sebastes melanops* (Girard)	Red snapper,† black snapper, black bass, bass rockfish, nero, cherna, pesce pretre, gray rockfish, black sea bass, sea bass, black rock
Blackgill rockfish	*Sebastes melanostomus* (Eigenmann and Eigenmann)	Blackmouth rockfish, deepsea rockfish
Vermilion rockfish	*Sebastes miniatus* (Jordan and Gilbert)	Red snapper,† red rock cod, rasher, borracho, genuine red, salmon grouper, borrachon
Blue rockfish	*Sebastes mystinus* (Jordan and Gilbert)	Bluefish, blue perch, priestfish, black rockfish, black bass, nervi, neri, black snapper
China rockfish	*Sebastes nebulosus* Ayres	Cefalutano, black and yellow rockfish, yellow-spotted rockfish, cerod, yellow rockfish, gopher, pelican, yellowstripe rockfish, speckled garrupa, chinafish
Tiger rockfish	*Sebastes nigrocinctus* Ayres	Banded rockfish, blackbanded rockfish, barred rockfish
Speckled rockfish	*Sebastes ovalis* (Ayres)	Red snapper,† widow rockfish, zipola, brownfish, beccafico, viuva
Bocaccio	*Sebastes paucispinis* Ayres	Red snapper†, rock cod, grouper, salmon grouper, tomcod (young), boccac, merou
Chameleon rockfish*	*Sebastes phillipsi* (Fitch)	
Canary rockfish	*Sebastes pinniger* (Gill)	Red snapper,† orange rockfish, codalarga, yellow snapper, filione, fantail, red rock cod, canary, bosco
Redstripe rockfish	*Sebastes proriger* (Jordan and Gilbert)	Red rockfish of Alaska, little red rock cod
Grass rockfish	*Sebastes rastrelliger* (Jordan and Gilbert)	Kelp rockfish, scomoda, green garrupa, green rockfish, lingcod, schmo
Yellowmouth rockfish*	*Sebastes reedi* (Westrheim and Tsuyuki)	
Rosy rockfish	*Sebastes rosaceus* Girard	Corsair, dude, scacciatale, scratch-tail
Greenblotched rockfish*	*Sebastes rosenblatti* Chen	
Yelloweye rockfish	*Sebastes ruberrimus* (Cramer)	Red snapper,† turkey-red rockfish, potbelly, drum, tambor, vecchia, red rock cod, yellowbelly, rasphead, golden eye, turkey rock
Flag rockfish	*Sebastes rubrivinctus* (Jordan and Gilbert)	Spanish flag, barberpole, Hollywood, convict fish, shoflies, tiger, barberpole snapper
Dwarf-red rockfish*	*Sebastes rufinanus* Lea and Fitch	
Bank rockfish*	*Sebastes rufus* (Eigenmann and Eigenmann)	Red snapper†
Stripetail rockfish	*Sebastes saxicola* (Gilbert)	Popeye rockfish, bigeye rockfish, oliveback rockfish
Halfbanded rockfish	*Sebastes semicinctus* (Gilbert)	Inspector
Olive rockfish	*Sebastes serranoides* (Eigenmann and Eigenmann)	Red snapper,† kelp yellowtail, kelp salmon, bass rockfish, sugar bass, sugarfish
Treefish	*Sebastes serriceps* (Jordan and Gilbert)	Convictfish, barberpole, garrupa
Pinkrose rockfish*	*Sebastes simulator* Chen	
Honeycomb rockfish	*Sebastes umbrosus* (Jordan and Gilbert)	Shaded rockfish, dusky rockfish
Whitebelly rockfish	*Sebastes vexillaris* (Jordan and Gilbert)	Sailfin rockfish, barriga blanca, Palermotana
Pygmy rockfish	*Sebastes wilsoni* (Gilbert)	Wilson's rockfish, slender rockfish, dwarf rockfish
Sharpchin rockfish	*Sebastes zacentrus* (Gilbert)	Bigeyed rockfish
Shortspine thornyhead	*Sebastolobus alascanus* Bean	Shortspine channel rockfish, idiot, hooligan, thornhead, lobe-finned rockfish, spiney-cheeked rockfish, bonehead, scorpion, fagiano, slim thornhead, gurnard, gurnet, channel cod
Longspine thornyhead	*Sebastolobus altivelis* Gilbert	Longspine channel rockfish, idiot, hooligan, thornhead, lobe-finned rockfish, spiny-cheeked rockfish, bonehead, scorpion, anglefin rockfish, deep-water rockfish, crimson thornhead

Thornyhead replaces channel rockfish since this name is more appropriate for a species that is not confined to channels. We follow AFS (1970) in this change.

Triglidae—searobins		
Splitnose searobin*	*Bellator xenisma* (Jordan and Bollman)	
Lumptail searobin	*Prionotus stephanophrys* Lockington	Smoothhead searobin
Hexagrammidae—greenlings		
Kelp greenling	*Hexagrammos decagrammus* (Pallas)	California seatrout, greenling, seatrout, rock trout, kelp, kelp greenling, rockfish, bluefish, spotted rock trout, bodieron, boregat, greenling, kelp trout, kelp cod
Whitespotted greenling	*Hexagrammos stelleri* Tilesius	Boregata, starling, Tommy cod, atka mackerel, sea trout, greenling
Rock greenling	*Hexagrammos superciliosus* (Pallas)	Fringed greenling, Pacific red rock trout, red greenling, sea trout, kelp cod
Lingcod	*Ophiodon elongatus* Girard	Pacific cultus, cultus cod, ling, greenling, cod, blue cod, bluefish, white cod, buffalo cod, leopard cod, codfish, green cod, bocalao, card, testoni, cultus, skilfish, buffalo
Painted greenling	*Oxylebius pictus* Gill	Convict fish, kelp fish
Atka-mackerel*	*Pleurogrammus monopterygius* (Pallas)	Atka greenling, atkafish, yellowfish
Anoplopomatidae—sablefishes		
Sablefish	*Anoplopoma fimbria* (Pallas)	‡Butterfish, coalfish, candlefish, skilfish, blackcod, coal cod, blue-cod, bluefish, deepsea trout, black candlefish, skill
Skilfish*	*Erilepis zonifer* (Lockington)	Aburabozu, fat priest
Zaniolepididae—combfishes		
Shortspine combfish	*Zaniolepis frenata* Eigenmann and Eigenmann	
Longspine combfish	*Zaniolepis latipinnis* Girard	Longspine greenling
Cottodiae—sculpins		
Coralline sculpin*	*Artedius corallinus* (Hubbs)	
Roughcheek sculpin*	*Artedius creaseri* (Hubbs)	
Padded sculpin*	*Artedius fenestralis* Jordan and Gilbert	
Scalyhead sculpin*	*Artedius harringtoni* Starks	Plumose sculpin
Smoothhead sculpin	*Artedius lateralis* (Girard)	Roundnosed sculpin
Puget Sound sculpin*	*Artedius meanyi* (Jordan and Starks)	
Bonyhead sculpin*	*Artedius notospilotus* Girard	Bonehead sculpin
Rosylip sculpin	*Ascelichthys rhodorus* Jordan and Gilbert	Rubber sculpin
Silverspotted sculpin*	*Blepsias cirrhosus* (Pallas)	Silverspot, nee-kaio-kaiung
Roughback sculpin*	*Chitonotus pugetensis* (Steindachner)	
Sharpnose sculpin*	*Clinocottus acuticeps* (Gilbert)	
Wooly sculpin	*Clinocottus analis* (Girard)	
Calico sculpin*	*Clinocottus embryum* (Jordan and Starks)	Mossy sculpin
Mosshead sculpin*	*Clinocottus globiceps* (Girard)	Globeheaded sculpin
Bald sculpin*	*Clinocottus recalvus* (Greeley)	Tide pool johnny

* Not listed in Roedel, 1962.

† These species of rockfish have been marketed in the filleted condition as red snapper since the late 1800s. Since the true red snapper, *Lutjanus campechanus* (Poey), belongs to the family Lutjanidae which is not represented on the Pacific coast of the United States, and since the name "red snapper" is firmly implanted in the vernacular of the commercial fishermen, we suggest the term "Pacific red snapper" be used when marketing these species in a filleted condition. On March 8, 1974, the California Fish and Game Commission adopted Section 103, Title 14, California Administrative Code, which states the term Pacific red snapper may be used as an alternate common name for these species.

‡ Filleted sablefish have been marketed as "butterfish" in California for many years. On Mafch 8, 1974, the California Fish and Game Commission adopted Section 103, Title 14, California Administrative Code, which states the term butterfish may be used as an alternate for the designated name, sablefish.

Cottodiae—sculpins—Continued

Designated common name	Scientific name	Other common names
Buffalo sculpin	*Enophrys bison* (Girard)	
Bull sculpin*	*Enophrys taurina* Gilbert	
Red Irish lord	*Hemilepidotus hemilepidotus* (Tilesius)	Spotted Irish lord, bullhead, red sculpin
Brown Irish lord	*Hemilepidotus spinosus* (Ayres)	Reef Irish lord
Dusky sculpin*	*Icelinus burchami* Evermann and Goldsborough	
Pithead sculpin*	*Icelinus cavifrons* Gilbert	
Threadfin sculpin*	*Icelinus filamentosus* Gilbert	Filamented sculpin
Fringed sculpin*	*Icelinus fimbriatus* Gilbert	
Frogmouth sculpin*	*Icelinus oculatus* Gilbert	
Yellowchin sculpin*	*Icelinus quadriseriatus* (Lockington)	
Spotfin sculpin*	*Icelinus tenuis* Gilbert	Lesser filamented sculpin
Longfin sculpin*	*Jordania zonope* Starks	Bandeye sculpin
Lavender sculpin*	*Leiocottus hirundo* Girard	
Pacific staghorn sculpin	*Leptocottus armatus* Girard	Bullhead, staghorn sculpin, cabezon, buffalo sculpin, smooth cabezon
Sailfin sculpin*	*Nautichthys oculofasciatus* (Girard)	Johnny, sailorfish
Tidepool sculpin*	*Oligocottus maculosus* Girard	Sculpin, tidepool johnny, johnny
Saddleback sculpin*	*Oligocottus rimensis* (Greeley)	Prickly sculpin
Rosy sculpin	*Oligocottus rubellio* (Greeley)	
Fluffy sculpin	*Oligocottus snyderi* Greeley	
Snubnose sculpin*	*Orthonopias triacis* Starks and Mann	
Thornback sculpin*	*Paricelinus hopliticus* Eigenmann and Eigenmann	
Slim sculpin*	*Radulinus asprellus* Gilbert	Darter sculpin
Darter sculpin*	*Radulinus boleoides* Gilbert	
Smoothgum sculpin*	*Radulinus vinculus* Bolin	
Grunt sculpin*	*Rhamphocottus richardsonii* Gunther	Gruntfish
Cabezon	*Scorpaenichthys marmoratus* (Ayres)	Bullhead, blue cod, sculpin, giant marbled sculpin, giant sculpin, marble sculpin, bull cod, salpa, scorpion, biggyhead, scaleless sculpin
Manacled sculpin*	*Synchirus gilli* Bean	
Flabby sculpin*	*Zesticelus profundorum* (Gilbert)	

Agonidae—poachers

Northern spearnose*	*Agonopsis emmelane* (Jordan and Starks)	Northern spearnose poacher, windowtail poacher, mottled poacher
Northern spearnose poacher in AFS (1970). We follow Miller and Lea (1972) and drop the term poacher since it only generates confusion. The term spearnose refers to the two spines on the rostral plate at the tip of the snout which project forward.		
Southern spearnose*	*Agonopsis sterletus* (Gilbert)	Southern spearnose poacher, snubnose poacher
Southern spearnose poacher in AFS (1970). See comments under northern spearnose.		
Sturgeon poacher*	*Agonus acipenserinus* Tilesius	Sturgeonlike seapoacher, common alligatorfish
Smooth alligatorfish*	*Anoplagonus inermis* (Gunther)	Smooth seapoacher, smooth poacher
Spinycheek starnose*	*Asterotheca infraspinata* (Gilbert)	
Bigeye starnose*	*Asterotheca pentacantha* (Gilbert)	Bigeye poacher
Bigeye poacher in AFS (1970). We follow Miller and Lea (1972) since starnose refers to the three upright rostral spines at the tip of the snout, and is a descriptive term.		
Blackfin starnose*	*Bathyagonus nigripinnis* Gilbert	Blackfin poacher
Blackfin poacher in AFS (1970). See comments under bigeye poacher.		
Rockhead*	*Bothragonus swanii* (Steindachner)	Deep-pitted seapoacher
Beardless spearnose*	*Ganoideus vulsus* (Jordan and Gilbert)	Beardless poacher
Beardless poacher in AFS (1970). See comments under northern spearnose.		
Warty poacher*	*Occella verrucosa* (Lockington)	Warty seapoacher

Pygmy poacher*	*Odontopyxis trispinosa* Lockington	Pithead poacher
Tubenose poacher*	*Pallasina barbata* (Steindachner)	Tubesnout poacher
Pricklebreast poacher*	*Stellerina xyosterna* (Jordan and Gilbert)	
Blackedge poacher*	*Xeneretmus latifrons* (Gilbert)	Blacktip poacher
Blacktip poacher in AFS (1970). We follow Miller and Lea (1972) and use the more descriptive attributive "blackedge."		
Smoothеye poacher*	*Xeneretmus leiops* Gilbert	Cutfin poacher
Flagfin poacher*	*Xeneretmus ritteri* Gilbert	Stripefin poacher, spiny poacher
Stripefin poacher in AFS (1970). We feel the attributive "flagfin" more appropriate and follow Miller and Lea (1972).		
Bluespotted poacher*	*Xeneretmus triacanthus* (Gilbert)	Bluespotted starnose

Liparididae—snailfishes

Blacktail snailfish*	*Careproctus melanurus* Gilbert	Blacktailed liparid
Tidepool snailfish*	*Liparis florae* (Jordan and Starks)	Shore liparid
Slipskin snailfish*	*Liparis fucensis* Gilbert	
Slimy snailfish*	*Liparis mucosus* Ayres	
Showy snailfish*	*Liparis pulchellus* Ayres	Shorttail snailfish
Ringtail snailfish*	*Liparis rutteri* (Gilbert and Snyder)	Ringtailed liparid, bandtail snailfish

ORDER PERCIFORMES

Serranidae—sea basses

Spotted cabrilla	*Epinephelus analogus* Gill	Cabrilla pinto
Snowy grouper*	*Epinephelus niveatus* (Valenciennes)	
Splittail bass*	*Hemanthias peruanus* (Steindachner)	Rose threadfin bass
Gulf grouper	*Mycteroperca jordani* (Jenkins and Evermann)	Cabrilla de astillero, baja, baya, garuppe de baya
Broomtail grouper	*Mycteroperca xenarcha* Jordan	Spikedtailed grouper, garuppa, pinto broomtail, spotted broomtail
Kelp bass	*Paralabrax clathratus* (Girard)	Rock bass, sand bass, cabrilla, calico bass, bull bass, kelp salmon, lockee cod, California kelp bass
Spotted sand bass	*Paralabrax maculatofasciatus* (Steindachner)	Spotted bass, rock bass, cabrilla, red spotted rock bass, spotted, spotted cabrilla, pinta cabrilla
Barred sand bass	*Paralabrax nebulifer* (Girard)	Rock bass, Johnny verde, kelp bass, sand bass, ground bass, sugar bass, cabrilla, California sand bass, California rock bass
We follow AFS (1970) and add the modifier to contrast with spotted sand bass.		
Striped bass	*Roccus saxatilis* (Walbaum)	Striper, streaked bass, squidhound, rock, rock bass, rock fish
Giant sea bass	*Stereolepis gigas* Ayres	Black sea bass, jewfish, giant bass, California jewfish, California black sea bass

Priacanthidae—bigeyes

Popeye catalufa*	*Pseudopriacanthus serrula* (Gilbert)	Catalufa

Apogonidae—cardinalfishes

Guadalupe cardinalfish*	*Apogon guadalupensis* (Osburn and Nichols)	

Branchio-stegidae—tilefishes

Ocean whitefish	*Caulolatilus princeps* (Jenyns)	Blanquillo, whitefish, blanka

* Not listed in Roedel, 1962.

Echeneididae—remoras

Designated common name	Scientific name	Other common names
Sharksucker*	*Echeneis naucrates* Linnaeus	Pega, pegador, sucking fish, white tail remora, Indian remora
Slender suckerfish*	*Phtheirichthys lineatus* (Menzies)	
Whalesucker*	*Remilegia australis* (Bennett)	
Gray marlinsucker*	*Remora brachyptera* (Lowe)	Spearfish remora, swordfish sucker
Spearfish remora in AFS (1970). We follow Miller and Lea (1972) and reserve the term remora for the species *Remora remora*.		
Remora	*Remora remora* (Linnaeus)	Sucker, pega, common remora
White suckerfish*	*Remorina albescens* (Temminck and Schlegel)	White marlinsucker
Hardfin marlinsucker*	*Rhombochirus osteochir* (Cuvier)	Spearfish sucker, marlinsucker
Marlinsucker in AFS (1970). We follow Miller and Lea (1972) and add the descriptive attributive "hardfin."		

Carangidae—jacks

Green jack	*Caranx caballus* Gunther	Common green jack, cocinero, jurel, cocinero dorado
Crevalle jack*	*Caranx hippos* (Linnaeus)	Crevalle, toro, cavally, jiguagua, horse crevalle, jack
Pacific bumper*	*Chloroscombrus orqueta* Jordan and Gilbert	Orqueta, Xurel de Castilla, yellowtail jack
Mexican scad	*Decapterus hypodus* Gill	Mackerel scad, scad, round robin, cigarfish, antonino, quiaquia
Pilotfish	*Naucrates ductor* (Linnaeus)	Romero
Leatherjacket*	*Oligoplites saurus* (Bloch and Schneider)	Skipjack, jurel, monda, yellowtailed leatherjacket
Pacific amberjack	*Seriola colburni* Evermann and Clark	Bull yellowtail, turel, cohalla, toro, turel de Castilla
Yellowtail	*Seriola dorsalis* (Gill)	California yellowtail, amberjack, amberfish, white salmon, cavasina, jack
We follow AFS (1970) and drop attributive "California" as listed by Roedel (1962) since this species occurs from Chile to southern Washington.		
Palo pompano*	*Trachinotus paitensis* Cuvier	
Gafftopsail pompano*	*Trachinotus rhodopus* (Gill)	Pompanito
Jack mackerel	*Trachurus symmetricus* (Ayres)	Horse mackerel, spanish mackerel, saurel, agii, jackfish, mackerel-jack, California horse mackerel, mackerel jack, Pacific jack mackerel
Cottonmouth jack*	*Uraspis secunda* (Poey)	
Pacific moonfish*	*Vomer declivifrons* Meek and Hildebrand	Horsefish, moonfish, jorobado, bluntnose shiner, pugnosed shiner

Nematistiidae—roosterfishes

Roosterfish	*Nematistius pectoralis* Gill	Papagallo, gallo, pez de gallo

Coryphaenidae—dolphinfishes

Dolphinfish	*Coryphaena hippurus* Linnaeus	Common dolphinfish, mahi-mahi, dolphin, dorado, dourade, common dolphin, small dolphin
We prefer "dolphinfish" to AFS's "dolphin" since there is otherwise possible confusion as to whether one is speaking of the fish or the mammal.		

Bramidae—pomfrets

Pacific pomfret	*Brama japonica* Hilgendorf	Pomfret, smallscaled pomfret, castagnole, rondanin
Roedel (1962) listed Pomfret, *Brama rayi*; however, this species subsequently has been synonymized with *Brama brama*, an Atlantic species, and the Pacific pomfret has been recognized as a distinct species.		
Fanfish*	*Pteraclis aesticola* (Jordan and Synder)	Benten-uwo
Bigscale pomfret*	*Taractichthys steindachneri* (Doderlein)	Manzai-uwo, eboshidai, hiredjiro-manzaiuo

Gerreidae—majarras

Silver mojarra*	*Eucinostomus argenteus* Baird and Girard	Spotfin mojarra
Spotfin mojarra in AFS (1970). We follow Miller and Lea (1972) since the dorsal fin of the Pacific flagfin mojarra has a black tip above a silver spot on the dorsal fin while the silver mojarra has a clear fin with fine speckling.		
Pacific flagfin mojarra*	*Eucinostomus gracilis* (Gill)	

Pristipomatidae—salema and sargos		
Sargo	*Anisotremus davidsonii* (Steindachner)	Perch, blue bass, black croaker, china croaker, California sargo, sargo raiado
Salema	*Xenistius californiensis* (Steindachner)	Bigeye bass, California salema, striped bass
Sparidae—porgies		
Pacific porgy	*Calamus brachysomus* (Lockington)	Mojarra garabata, porgy
Scieaenidae—croakers		
Bairdiella	*Bairdiella icistia* (Jordan and Gilbert)	Gulf croaker
This is a Gulf of California species introduced and established in the Salton Sea.		
Black croaker	*Cheilotrema saturnum* (Girard)	Chinese croaker, black perch, blue bass, black bass, surf fish, red roncador, chinafin croaker
White seabass	*Cynoscion nobilis* (Ayres)	California white seabass, young sometimes called sea trout, weakfish, king croaker, white croaker
Shortfin corvina	*Cynoscion parvipinnis* Ayres	Caravina, corvina, shortfin seabass
Orangemouth corvina	*Cynoscion xanthulus* Jordan and Gilbert	Yellowmouth, corvina de las aletas amarillas
This is a Gulf of California species introduced and established in the Salton Sea.		
White croaker	*Genyonemus lineatus* (Ayres)	Tomcod, kingfish, shiner, chenfish, herring, Pasadena trout, carbinette, carbinette, roncador, tommy, cognard, little bass, little roncador, tommy croaker
California corbina	*Menticirrhus undulatus* (Girard)	California whiting, corvina, surf fish, bagre, sucker, corbina
Spotfin croaker	*Roncador stearnsii* (Steindachner)	Spot, golden croaker, surf fish, roncador
Queenfish	*Seriphus politus* Ayres	Kingfish, tomcod, sea trout, shiner, herring, white croaker, herring croaker
Yellowfin croaker	*Umbrina roncador* Jordan and Gilbert	Surf fish, yellowfinned roncador, Catalina croaker, yellowtailed croaker, golden croaker
Mullidae—goatfishes		
Mexican goatfish*	*Mulloidichthys dentatus* (Gill)	Goatfish
Girellidae—nibblers		
Opaleye	*Girella nigricans* (Ayres)	Green perch, black perch, blue-eyed perch, bluefish, Catalina perch, button perch, greenfish, blue bass, blue-eye, blue perch, Jack Benny, California opaleye
Scorpididae—halfmoons		
Halfmoon	*Medialuna californiensis* (Steindachner)	Blue perch, blue bass, medialuna, Catalina perch, California halfmoon, Catalina blue perch, black perch
Kyphosidae—sea chubs		
Zebraperch	*Hermosilla azurea* Jenkins and Evermann	Convict fish, perch
Blue-bronze chub*	*Kyphosus analogus* (Gill)	Salmena
Ephippidae—spadefishes		
Pacific spadefish*	*Chaetodipterus zonatus* (Girard)	Spadefish

* Not listed in Roedel, 1962.

Chaetodontidae—butterflyfishes

Designated common name	Scientific name	Other common names
Scythemarked butterflyfish*	*Chaetodon falcifer* Hubbs and Rechnitzer	Scythe butterflyfish
Scythe butterflyfish in AFS (1970). We follow Miller and Lea (1972) since scythemarked is more descriptive of the fish.		
Three-banded butterflyfish*	*Chaetodon humeralis* Gunther	Doll fish, muñeca

Pentacerotidae—armorheads

Pelagic armorhead*	*Pentaceros richardsoni* Smith	Boarfish

Embiotocidae—surfperches

Barred surfperch	*Amphistichus argenteus* Agassiz	Barred perch, silver perch, surf perch, sand perch, silver surf fish
Calico surfperch	*Amphistichus koelzi* (Hubbs)	California porgie, humpback perch
Redtail surfperch	*Amphistichus rhodoterus* (Agassiz)	Rosy surf fish, redtail seaperch, porgy, Oregon porgie
Kelp surfperch†	*Brachyistius frenatus* Gill	Kelp perch, kelp seaperch, brown seaperch
Shiner surfperch†	*Cymatogaster aggregata* Gibbons	Shiner perch, shiner, sparada, minny, shiner seaperch, yellow shiner, bay perch, seven-eleven perch
Island surfperch†	*Cymatogaster gracilis* Tarp	Island seaperch
Pile surfperch†	*Damalichthys vacca* Girard	Pile perch, forktail perch, porgee, white perch, splittail perch, pile seaperch, dusky seaperch, porgee, silver perch
Black surfperch†	*Embiotoca jacksoni* Agassiz	Black perch, common surf fish, bay perch, porgy, blue perch, bay blackperch
Striped surfperch†	*Embiotoca lateralis* Agassiz	Striped seaperch, striped perch, blue perch, rainbow perch, squawfish, crugnoli, blue surf fish, striped surf fish, blue seaperch
Spotfin surfperch	*Hyperprosopon anale* Agassiz	
Walleye surfperch	*Hyperprosopon argenteum* Gibbons	Surf fish, silver perch, walleye surf fish, walleye seaperch, china pompano, white perch
Silver surfperch	*Hyperprosopon ellipticum* (Gibbons)	Silver perch, shiner
Rainbow surfperch†	*Hypsurus caryi* (Agassiz)	Rainbow seaperch, rainbow perch, striped perch, bugara, moharra
Reef surfperch†	*Micrometrus aurora* (Jordan and Gilbert)	Reef perch
Dwarf surfperch†	*Micrometrus minimus* (Gibbons)	Dwarf perch, shiner
Sharpnose surfperch†	*Phanerodon atripes* (Jordan and Gilbert)	Sharpnose seaperch
White surfperch†	*Phanerodon furcatus* Girard	White seaperch, Pacific white perch, split-tail perch, forktail perch, white surf fish, white perch, shiner
Rubberlip surfperch†	*Rhacochilus toxotes* (Agassiz)	Rubberlip seaperch, rubberlip perch, porgee, alfione, pile perch, niggerlip, sprat, liverlip, buttermouth
Pink surfperch†	*Zalembius rosaceus* (Jordan and Gilbert)	Pink seaperch

Pomacentridae—damselfishes

Blacksmith	*Chromis punctipinnis* (Cooper)	Perch, blue perch, kelp perch, rock bass, black perch
Garibaldi	*Hypsypops rubicundus* (Girard)	Ocean goldfish, garibaldi perch, golden perch

Mugilidae—mullets

Striped mullet	*Mugil cephalus* Linnaeus	Mullet

Sphyraenidae—barracudas

California barracuda	*Sphyraena argentea* Girard	Pacific barracuda, scoots, scooters, snake, barracuda, log barracuda, barry

Listed as Pacific barracuda in AFS (1970). The occurrence of this species is primarily restricted to the Californias (Alta and Baja) north of Cape San Lucas, with another species occurring in the Gulf of California. We follow Roedel (1962) and use the attributive "California."

Polynemidae—threadfins		
Blue bobo*	*Polydactylus approximans* (Lay and Bennett)	Blue threadfin, Pacific threadfin, threadfin
Yellow bobo*	*Polydactylus opercularis* (Linnaeus)	Yellow threadfin
Labridae—wrasses		
Rock wrasse	*Halichoeres semicinctus* (Ayres)	California wrasse, parrot fish, wrasse
Señorita	*Oxyjulis californica* (Gunther)	Kelpfish, pescerey, kelp wrasse, butterfish
California sheephead	*Pimelometopon pulchrum* (Ayres)	Sheephead, California redfish, fathead, humpy, redfish
Trichodontidae—sandfishes		
Pacific sandfish*	*Trichodon trichodon* (Tilesius)	Sandfish
Bathymasteridae—ronquils		
Smooth ronquil*	*Rathbunella hypoplecta* (Gilbert)	
Northern ronquil*	*Ronquilus jordani* (Gilbert)	Ronquil
Uranoscopidae—stargazers		
Smooth stargazer*	*Kathetostoma averruncus* Jordan and Bollman	
Blenniidae—combtooth blennies		
Bay blenny*	*Hypsoblennius gentilis* (Girard)	
Rockpool blenny	*Hypsoblennius gilberti* (Jordan)	
Mussel blenny*	*Hypsoblennius jenkinsi* Jordan and Evermann	Crevice blenny
Anarhichadidae—wolffishes		
Wolf-eel	*Anarrhichthys ocellatus* Ayres	
Clinidae—clinids		
Island kelpfish	*Alloclinus holderi* (Lauderbach)	Island klipfish
Orangethroat pikeblenny	*Chaenopsis alepidota* (Gilbert)	Pacific pikeblenny, pikeblenny
Deepwater blenny*	*Cryptotrema corallinum* Gilbert	Deepwater klipfish
Spotted kelpfish	*Gibbonsia elegans* (Cooper)	Oscellated klipfish
Scarlet kelpfish*	*Gibbonsia erythra* Hubbs	Scarlet klipfish
Striped kelpfish	*Gibbonsia metzi* Hubbs	Seaweed kelpfish, weed klipfish
Crevice kelpfish*	*Gibbonsia montereyensis* Hubbs	Spotted kelpfish, crevice klipfish
Giant kelpfish	*Heterostichus rostratus* Girard	Kelpfish, eel, kelp blenny, butterfish
Sarcastic fringehead	*Neoclinus blanchardi* Girard	Kelp fish
Yellowfin fringehead*	*Neoclinus stephensae* Hubbs	
Onespot fringehead	*Neoclinus uninotatus* Hubbs	
Reef finspot	*Paraclinus integripinnis* (Smith)	
Cryptacanthodidae—wrymouths		
Giant wrymouth*	*Delolepis gigantea* Kittlitz	Congo eel
Dwarf wrymouth*	*Lyconectes aleutensis* Gilbert	Red devil

* Not listed in Roedel, 1962.

† A rule-of-thumb was applied in 1953 in naming embiotocids which called for using "surfperch" for those species which typically are surf dwellers, "seaperch" for those associated with the ocean but not primarily with the surf, and "perch" alone for those of varying habitat. This has led to some confusion at times, so we follow Miller and Lea (1972) and apply the term "surfperch" to all members of the family except the tuleperch, *Hysterocarpus traskii*, the only freshwater representative of the group. Those species names followed by a † were listed in Roedel (1962) and AFS (1970) following the above rule of thumb.

Cebidichthyidae—monkeyface-eels

Designated common name	Scientific name	Other common names
Monkeyface-eel	*Cebidichthys violaceus* (Girard)	Monkeyface prickleback, blenny eel, monkeyface blenny, eel, giant monkeyface-eel, California monkeyface-eel

Monkeyface prickleback in AFS (1970). The term "eel" is so ingrained in the vernacular of California fishermen with respect to this species, we must follow Roedel (1962) and apply the name, monkeyface-eel. This also helps reduce confusion in names of "blenny-like" fishes in other families.

Stichaeidae—pricklebacks

Slender cockscomb*	*Anoplarchus insignis* Gilbert and Burke	
High cockscomb*	*Anoplarchus purpurescens* Gill	Central cockscomb, crested blenny, cockscomb prickleback, cockscomb
Mosshead warbonnet*	*Chirolophis nugator* (Jordan and Williams)	Ornamented blenny, mosshead prickleback
Snake prickleback*	*Lumpenus sagitta* Wilimovsky	Eel-blenny, Pacific snake prickleback
Ribbon prickleback*	*Phytichthys chirus* (Jordan and Gilbert)	Belted blenny
Crisscross prickleback*	*Plagiogrammus hopkinsi* Bean	
Bluebarred prickleback*	*Plectobranchus evides* Gilbert	Black and white prickleback
Whitebarred prickleback*	*Poroclinus rothrocki* Bean	Whitebanded prickleback
Black prickleback*	*Xiphister atropurpureus* (Kittlitz)	
Rock prickleback	*Xiphister mucosus* (Girard)	Blenny-eel, rock blenny, rock-eel, black eel, eel, slick eel

Roedel (1962) lists this species as rock-eel; however, we follow AFS (1970) since this is not an eel even though fishermen commonly refer to it as one. The use of prickleback also helps reduce confusion in names of "blenny-like" fishes in other families.

Pholididae—gunnels

Penpoint gunnel*	*Apodichthys flavidus* Girard	Penpoint blenny
Longfin gunnel*	*Pholis clemensi* Rosenblatt	
Crescent gunnel*	*Pholis laeta* (Cope)	Bracketed blenny
Saddleback gunnel*	*Pholis ornata* (Girard)	Saddled blenny
Red gunnel*	*Pholis schultzi* Hubbs	Slender gunnel
Kelp gunnel*	*Ulvicola sanctaerosae* Gilbert and Starks	
Rockweed gunnel*	*Xererpes fucorum* (Jordan and Gilbert)	Fucus blenny

Scytalinidae—graveldivers

Graveldiver*	*Scytalina cerdale* Jordan and Gilbert	Borrowing blenny

Zaproridae—prowfishes

Prowfish*	*Zaprora silenus* Jordan	

Icosteidae—ragfishes

Ragfish*	*Icosteus aenigmaticus* Lockington	Brown ragfish, fantailed ragfish

Ammodytidae—sand lances

Pacific sandlance	*Ammodytes hexapterus* Pallas	Inshore sandlance, sandlance

Eleotridae—sleepers

Pacific fat sleeper*	*Dormitator latifrons* (Richardson)	

Gobiidae—gobies

Yellowfin goby*	*Acanthogobius flavimanus* (Temminck and Schlegel)	
Arrow goby*	*Clevelandia ios* (Jordan and Gilbert)	Mud goby
Blackeye goby	*Coryphopterus nicholsii* (Bean)	Large scaled goby, crested goby, bluespot goby
Listed as bluespot goby by Roedel (1962), but we follow AFS (1970) since blackeye goby is the more commonly used name.		
Tidewater goby*	*Eucyclogobius newberryi* (Girard)	
Longjaw mudsucker	*Gillichthys mirabilis* Cooper	Mudsucker, longjawed goby
Longtail goby*	*Gobionellus longicaudus* (Jenkins and Evermann)	
Cheekspot goby*	*Ilypnus gilberti* (Eigenmann and Eigenmann)	
Bay goby*	*Lepidogobius lepidus* (Girard)	Finescale goby
Kelp goby*	*Lethops connectens* Hubbs	Halfblind goby
Halfblind goby in AFS (1970). Kelp goby seems much more appropriate so we follow Miller and Lea (1972) in designating this name.		
Bluebanded goby	*Lythrypnus dalli* (Gilbert)	
Zebra goby	*Lythrypnus zebra* (Gilbert)	
Shadow goby*	*Quietula y-cauda* (Jenkins and Evermann)	
Chameleon goby*	*Tridentiger trigonocephalus* (Gill)	Trident goby, specklefaced goby
This species is listed as trident goby by AFS (1970); however, we follow Miller and Lea (1972) since this fish has the ability to change rapidly (within seconds) its color pattern to either stripes or bars and the term "chameleon" is more appropriate.		
Blind goby	*Typhlogobius californiensis* Steindachner	

Gempylidae—snake mackerels

Snake mackerel*	*Gempylus serpens* Cuvier	
Oilfish*	*Ruvettus pretiosus* Cocco	

Trichiuridae—cutlassfishes

Razorback scabbardfish*	*Assurger anzac* (Alexander)	
Pacific scabbardfish*	*Lepidopus xantusi* Goode and Bean	Scabbardfish, black scabbardfish
Scabbardfish in AFS (1970). We add the attributive "Pacific" to reduce confusion with razorback scabbardfish.		
Pacific cutlassfish	*Trichiurus nitens* Garman	Cutlassfish

Scombridae—mackerels and tunas

Slender tuna*	*Allothunnus fallai* Serventy	
Bullet mackerel	*Auxis rochei* (Risso)	Barred frigate mackerel, Pacific bullet mackerel
Frigate mackerel	*Auxis thazard* (Lacepede)	Streaked frigate mackerel, wavyback frigate mackerel, Mexican skipjack, keokeo
Wavyback skipjack	*Euthynnus affinis* Cantor	Kawakawa, little tuna
Kawakawa in AFS (1970). We follow Roedel (1962) since the term "wavyback" is more descriptive of the fish and more meaningful to California fishermen.		
Black skipjack	*Euthynnus lineatus* Kishinouye	Cross bred mackerel, Mexican little tunny
Skipjack tuna	*Euthynnus pelamis* (Linnaeus)	Skippy, striped tuna, oceanic bonito, skipjack, watermelon, victor fish, oceanic skipjack, artic bonito, tuna
Escolar*	*Lepidocybium flavobrunneum* (Smith)	Deepsea escolar
Pacific bonito	*Sarda chiliensis* (Cuvier)	Bonito, California bonito, striped tuna, ocean bonito, skipjack
Pacific mackerel	*Scomber japonicus* Houttuyn	Blue mackerel, chub mackerel, green mackerel, right mackerel, greenback mackerel, striped mackerel, green jack, American mackerel, zebra mackerel, mackerel
Chub mackerel in AFS (1970). We retain the name Pacific mackerel since it currently is so well established in the laws of California as well as in the vernacular of the fishermen.		

* Not listed in Roedel, 1962.

Scombridae—mackerels and tunas—Continued

Designated common name	Scientific name	Other common names
Monterey spanish mackerel	*Scomberomorus concolor* (Lockington)	Monterey mackerel, spanish mackerel
Sierra	*Scomberomorus sierra* Jordan and Starks	Sierra mackerel, spanish mackerel, cero, spotted mackerel
Albacore	*Thunnus alalunga* (Bonnaterre)	Longfinned tuna, abrego, Pacific albacore, long-finned albacore, aliconghi, German, germo
Yellowfin tuna	*Thunnus albacares* (Bonnaterre)	Yellowfinned albacore, Pacific yellowfin tuna, tuna
Bigeye tuna	*Thunnus obesus* Lowe	Bigeyed, patudo, tuna
Bluefin tuna	*Thunnus thynnus* (Linnaeus)	Tunny, great tunny, leaping tuna, California bluefin tuna, Pacific bluefin tuna, shortfin tuna, horse mackerel, ahi, great albacore, tuna

Pacific albacore, *Thunnus germo*; Pacific yellowtail, *Neothunnus macr pterus*; Pacific bigeye tuna, *Parathunnus sibi*; and California bluefin tuna, *Thunnus saliens*; in Roedel (1962). Subsequent to that time all these species have been placed in the genus *Thunnus* and synonymized with worldwide species; therefore, we have dropped the attributives Pacific and California as being inappropriate.

Xiphiidae—swordfishes

Swordfish	*Xiphias gladius* Linnaeus	Broadbill, broadbill swordfish

Luvaridae—louvars

Louvar	*Luvarus imperialis* Rafinesque	

Istiophoridae—billfishes

Sailfish	*Istiophorus platypterus* (Shaw and Nodder)	Pacific sailfish

Roedel (1962) listed Pacific sailfish, *Istiophorus greyi*; however, subsequently all sailfish species from all oceans have been synonymized under a single cosmopolitan species. We therefore drop the attributive "Pacific" as being inappropriative.

Black marlin	*Makaira indica* (Cuvier)	Spearfish, spikefish, sailfish
Blue marlin	*Makaira nigricans* Lacepede	Spearfish, spikefish, sailfish
Shortbill spearfish	*Tetrapturus angustirostris* Tanaka	
Striped marlin	*Tetrapturus audax* (Philippi)	Spearfish, spikefish, sailfish, Pacific marlin

Centrolophidae—medusafishes

Medusafish	*Icichthys lockingtoni* Jordan and Gilbert	Brown rubberfish

Stromateidae—butterfishes

Pacific butterfish	*Peprilus simillimus* (Ayres)	Pacific pompano, butterfish, California pompano, California butterfish, pompano

Pacific pompano in Roedel (1962) and AFS (1970). This name is somewhat misleading since "pompano" is most frequently used in reference to certain fishes in the family Carangidae; therefore, we follow Miller and Lea (1972) and designate the common name Pacific butterfish.

Tetragonuridae—squaretails

Smalleye squaretail	*Tetragonurus cuvieri* Risso	Squaretail, escolar de natura, courpata, sea raven, Pacific squaretail

ORDER PLEURONECTIFORMES

Bothidae—lefteye flounders

Pacific sanddab	*Citharichthys sordidus* (Girard)	Sand dab, soft flounder, sole, mottled sanddab, megrim
Speckled sanddab	*Citharichthys stigmaeus* Jordan and Gilbert	Sand dab
Longfin sanddab	*Citharichthys xanthostigma* Gilbert	Sand dab, soft flounder, Catalina sanddab
Bigmouth sole	*Hippoglossina stomata* Eigenmann and Eigenmann	Bigmouth flounder, bigmouth halibut
California halibut	*Paralichthys californicus* (Ayres)	Halibut, chicken halibut, bastard halibut, southern halibut, alabato, Monterey halibut
Fantail sole	*Xystreurys liolepis* Jordan and Gilbert	Longfinned flounder, longfin sole, true petrale, fantail halibut, fantail flounder

Pleuronectidae—righteyed flounders

Arrowtooth flounder	*Atheresthes stomias* (Jordan and Gilbert)	Arrowtoothed sole, arrowtooth halibut, turbot, bastard halibut, French sole, longjawed flounder, English flounder
Deepsea sole	*Embassichthys bathybius* (Gilbert)	Speckled sole, blackmouth sole
Petrale sole	*Eopsetta jordani* (Lockington)	Roundnosed sole, Jordan's flounder, California sole, English sole, brill, soglia
Rex sole	*Glyptocephalus zachirus* Lockington	Longfinned sole, witch sole
Flathead sole*	*Hippoglossoides elassodon* Jordan and Gilbert	
Pacific halibut	*Hippoglossus stenolepis* Schmidt	Halibut, alabato, northern halibut, right halibut, genuine halibut, real halibut
Diamond turbot	*Hypsopsetta guttulata* (Girard)	Diamond flounder, turbot, halibut, sole
Butter sole	*Isopsetta isolepis* (Lockington)	Scalyfin sole, scalyfinned flounder, Bellingham sole, sole, rock sole
Scalyfin sole in Roedel (1962). We follow AFS (1970) since the name "butter sole" is so well established in the vernacular.		
Rock sole	*Lepidopsetta bilineata* (Ayres)	Broadfin sole, doublelined flounder, flounder, rock sole, sole, gravel sole, roughback sole
Slender sole	*Lyopsetta exilis* (Jordan and Gilbert)	Slender flounder, rough sole
Dover sole	*Microstomus pacificus* (Lockington)	Slippery sole, slime sole, shortfinned sole, rubber sole, smear dab, lemon sole, Chinese sole
English sole	*Parophrys vetulus* Girard	Pointednosed sole, common sole, California sole, lemon sole, sole, sharpnose sole
Starry flounder	*Platichthys stellatus* (Pallas)	Rough jacket, great flounder, sole, English sole, flounder, grindstone, California flounder, emery flounder
C-O turbot	*Pleuronichthys coenosus* Girard	C-O sole, mottled turbot
C-O sole in AFS (1970). Members of this genus are generally called "turbot" and lumped under that name in reporting the California commercial catch. For that reason we follow Roedel (1962).		
Curlfin turbot	*Pleuronichthys decurrens* Jordan and Gilbert	California turbot, curlfinned flounder, curlfin sole, sand dab
Spotted turbot	*Pleuronichthys ritteri* Starks and Morris	Ritter's turbot
Hornyhead turbot	*Pleuronichthys verticalis* Jordan and Gilbert	Sharpridged turbot, sharpridged flounder, sand dab
Sand sole	*Psettichthys melanostictus* Girard	Fringe sole, spotted flounder, sand dab
Greenland halibut*	*Reinhardtius hippoglossoides* (Walbaum)	Halibut, right halibut, northern halibut, genuine halibut, real halibut, alabato, sole

Cynoglossidae—tonguefishes

California tonguefish	*Symphurus atricauda* (Jordan and Gilbert)	Tongue sole, tonguefish

ORDER TETRAODONTIFORMES

Balistidae—triggerfishes

Finescale triggerfish	*Balistes polylepis* Steindachner	Pez puerco
Black triggerfish*	*Melichthys niger* (Bloch)	Black durgon
Black durgon in AFS (1970). We follow Miller and Lea (1972) since we feel the term "triggerfish" is more easily identified with the family.		
Redtail triggerfish*	*Xanthichthys mento* (Jordan and Gilbert)	

Ostraciidae—boxfishes

Spiny boxfish*	*Ostracion diaphanum* Bloch and Schneider	

* Not listed in Roedel, 1962.

Tetraodontidae—puffers

Designated common name	Scientific name	Other common names
Oceanic puffer*	*Lagocephalus lagocephalus* (Linnaeus)	
Bullseye puffer*	*Sphoeroides annulatus* (Jenyns)	Globe fish, network puffer
Botete*	*Sphoeroides lobatus* (Steindachner)	Gulf puffer

Diodontidae—porcupinefishes

Pacific burrfish*	*Chilomycterus affinis* Gunther	Burfish
Spotted porcupine fish*	*Diodon hystrix* Linnaeus	Porcupinefish

Porcupinefish in AFS (1970). We follow Miller and Lea (1972), since the attributive "spotted" helps identify the species.

Molidae—molas

Common mola	*Mola mola* (Linnaeus)	Ocean sunfish, mola, sun fish, millstone, headfish

We add the attributive common to name "mola" as listed by Roedel (1962) since it is by far the most common of the two molas in California waters. AFS (1970) list "ocean sunfish" which also is applied in the vernacular.

Slender mola*	*Ranzania laevis* (Pennant)	

MOLLUSCA†

CLASS-GASTROPODS‡

ORDER DIOTOCARDIA

Acmaeidae—limpets

Fingered limpet	*Acmaea digitalis* Eschscholtz	Finger limpet
Whitecap limpet	*Acmaea mitra* Eschscholtz	Whitecap, dunecap limpet
Owl limpet	*Lottia gigantea* Sowerby	Giant owl shell, owl shell

Haliotidae—abalones

Threaded abalone	*Haliotis assimilis* Dall	
Pink abalone	*Haliotis corrugata* Gray	Corrugated abalone, rough abalone
Black abalone	*Haliotis cracherodii* Leach	
Green abalone	*Haliotis fulgens* Philippi	Splendid abalone, splendid ear shell, blue abalone
Pinto abalone	*Haliotis kamtschatkana* Jonas	Japanese abalone
Red abalone	*Haliotis rufescens* Swainson	
White abalone	*Haliotis sorenseni* Bartsch	
Flat abalone	*Haliotis walallensis* Stearns	Northern green abalone

Fissurellidae—keyhole limpets

Volcano limpet	*Fissurella volcano* Reeve	Volcano keyhole limpet
Giant keyhole limpet	*Megathura crenulata* (Sowerby)	Black keyhole limpet

Trochidae—turbans

Purple ringed top shell	*Calliostoma annulatum* (Lightfoot)	
Channeled top shell	*Calliostoma canaliculatum* (Lightfoot)	
Ribbed top shell	*Calliostoma ligatum* Gould	
Brown turban	*Tegula brunnea* (Philippi)	Brown tegula, brown top

Black turban	*Tegula funebralis* (Adams)	Black tegula, black top
Speckled turban	*Tegula gallina* (Forbes)	Speckled tegula, speckled top
Monterey turban	*Tegula montereyi* Kiener	Monterey tegula
Dusky turban	*Tegula pulligo* Gmelim	Dusky tegula

Turbinidae—tops

Red top	*Astraea gibberosa* (Dillwyn)	Red turban
Wavy top	*Astraea undosa* (Wood)	Wavy turban, wavy top turban, wavy turbine

ORDER MONOTOCARDIA

Littorinidae—periwinkles

Eroded periwinkle	*Littorina planaxis* Philippi	Flatbottomed periwinkle, flat periwinkle, gray littorina
Checkered periwinkle	*Littorina scutulata* Gould	

Vermetidae—worm shells

Scaled worm shell (snail)	*Serpulorbis squamigerus* (Carpenter)	Scaly worm mollusk

Potamididae—horn shells

California horn shell (snail)	*Cerithidea californica* (Haldeman)	

Hipponicidae—hoof shells

Hoof shell (snail)	*Hipponix antiquatus* Linnaeus	Ancient hoof shell, horse hoof shell

Calyptraeidae—slippers

Hooked slipper	*Crepidula adunca* Sowerby	Turban slipper shell
Onyx slipper	*Crepidula onyx* Sowerby	
Half slipper	*Crepipatella lingulata* (Gould)	Pacific half slipper, wrinkled slipper shell
Spiny cup and saucer	*Crucibulum spinosum* (Sowerby)	Cup and saucer, cup and saucer limpet

Naticidae—moon snails

Lewis moon snail	*Polinices lewisii* (Gould)	Northern moon snail, western moon shell, Lewis's bullseye
Southern moon snail	*Polinices reclusianus* (Deshayes)	Recluz's moon snail, Recluz's bullseye

Cypraeidae—cowries

Chestnut cowry	*Cypraea spadicea* (Swainson)	Nutbrown cowry

Bursidae—frog shells

California frog shell (snail)	*Bursa californica* (Hinds)	California frog mollusk

* Not listed in Roedel, 1962.
† Mollusks, echinoderms, and arthropods were not considered by Roedel (1962).
‡ When using common names of gastropods in reports, we suggest the term "snail" be added, when appropriate, when reference is made to a living animal and the term "shell" be added when referring only to the shell. This procedure will help the reader determine whether an animal was collected or just the remains, and if the animal actually occurs in the area covered by the report (collected alive) or may occur in the area (only shell collected).

Muricidae—murex

Designated common name	Scientific name	Other common names
Belcher's murex	*Forreria belcheri* (Hinds)	Giant forreria, Belcher's chorus shell
Lurid rock	*Ocenebra lurida* (Middendorff)	Lurid ocenebra, lurid murex
Poulson's rock	*Ocenebra poulsoni* (Carpenter)	
Festive murex	*Pteropurpura festiva* (Hinds)	Festive rock shell
Three winged murex	*Pteropurpura triolata* (Sowerby)	Three-winged rock shell

Buccinidae—whelks

Kellet's whelk	*Kelletia kelletii* (Forbes)	

Olividae—olives

Beatic olive	*Olivella baetica* Carpenter	Beatic olivella, beatic dwarf olive, brown olive
Purple olive	*Olivella biplicata* (Sowerby)	Purple olivella, purple dwarf olive, California purple olive

Conidae—cones

California cone	*Conus californicus* Hinds	

ORDER TECTIBRANCHIATA

Bullidae—bubbles

California bubble	*Bulla gouldiana* Pilsbry	Gould's bubble, cloudy bubble

Atyidae—paper bubbles

Gould's paper bubble	*Haminoea vesicula* (Gould)	White bubble shell, bubble shell, blister paper bubble
Green paper bubble	*Haminoea virescens* (Sowerby)	Green bubble shell

CLASS-PELECYPODA

ORDER PTEROCOMCHIDA

Mytilidae—mussels

San Diego peapod	*Adula diegensis* (Dall)	
Peapod borer	*Adula falcata* (Gould)	Falcate date mussel, peapod shell, hooked peapod
Ribbed horsemussel	*Gukensia demissa* (Dillwyn)	Ribbed mussel
Date mussel	*Lithophaga plumula* (Hanley)	Rock boring mussel, rock eating mussel, rock-dwelling mussel, rock borer
Fat horsemussel	*Modiolus capax* (Conrad)	Capax horsemussel, horsemussel
Straight horsemussel	*Modiolus rectus* (Conrad)	Giant horsemussel, horsemussel, straight mussel
California seamussel	*Mytilus californianus* Conrad	California mussel, mussel, sea mussel
Bay mussel	*Mytilus edulis* Linnaeus	Edible mussel, black mussel, blue mussel
Platform mussel	*Septifer bifurcatus* (Conrad)	Branch-ribbed mussel

Ostreidae—oysters

Giant Pacific oyster	*Crassostrea gigas* (Thunberg)	Japanese oyster
Eastern oyster	*Crassostrea virginica* (Gmelin)	Virginia oyster
Native oyster	*Ostrea lurida* Carpenter	Lurid oyster, Olympia oyster, California oyster

Pectinidae—scallops

Speckled scallop	*Aequipecten aequisculcatus* (Carpenter)	Bay scallops, speckled pecten
Rock scallop	*Hinnites multirugosus* Gale	Purplehinged pecten, giant rock scallop, rock pecten, purplehinged scallop
Weathervane scallop	*Pecten caurinus* (Gould)	
San Diego scallop	*Pecten diegensis* Dall	San Diego pecten

Anomiidae—jingles

Pearly jingle	*Anomia peruviana* d'Orbigny	Lawless shell, jingle shell, Peruvian jingle, rock oyster, lamp anomia, common jingle
Abalone jingle	*Pododesmus cepio* (Gray)	Blister oyster

ORDER PACYODONTIDA

Chamidae—chamas

Agate chama	*Chama pellucida* Sowerby	Clear jewel box, jewel box, agate jewel box, agate rock oyster
California reversed chama	*Pseudochama exogyra* (Conrad)	Reversed chama, reversed jewel box, reversed rock oyster

ORDER HETERODONTIDA

Cardiidae—cockles

Basket cockle	*Clinocardium nuttalli* (Conrad)	Nuttall's cockle
Smooth giant cockle	*Laevicardium elatum* (Sowerby)	Giant egg cockle, giant cockle
Spiny cockle	*Trachycardium quadragenarium* (Conrad)	Forty ribbed cockle, giant Pacific cockle, forty ribbed heart clam

Veneridae—venus clams

White amiantis	*Amiantis callosa* (Conrad)	White venus, sea cockle
Banded chione	*Chione californiensis* (Broderip)	California chione, banded cockle, California venus, hardshell cockle
Smooth chione	*Chione fluctifraga* (Sowerby)	Smooth cockle, smooth Pacific venus, smooth California venus, hardshell cockle
Wavy chione	*Chione undatella* (Sowerby)	Wavy cockle, frilled California venus, hardshell cockle
Northern quahog	*Mercenaria mercenaria* (Linnaeus)	Quahog, round clam, hardshell clam
Roughsided littleneck	*Protothaca laciniata* (Carpenter)	Folded littleneck, netted carpet shell
Common littleneck	*Protothaca staminea* (Conrad)	Littleneck clam, ribbed carpet shell, common Pacific littleneck, native littleneck, rock cockle, hardshell, Tomales Bay cockle, rock clam
Thinshelled littleneck	*Protothaca tenerrima* (Carpenter)	Finest carpet shell, thinshelled cockle
Smooth Washington clam	*Saxidomus giganteus* (Deshayes)	Giant saxidome, giant rockdweller, big neck clam, butter clam, money shell
Common Washington clam	*Saxidomus nuttalli* Conrad	Washington clam, Nuttall's saxidome, bigneck clam, butter clam, money shell
Japanese littleneck	*Ruditapes semidecussata* (Reeve)	
Pismo clam	*Tivela stultorum* (Mawe)	Great tivela, thickshell tivela
Ford's venus	*Ventricolaria fordii* (Yates)	

Mactridae—dish clams

California mactra	*Mactra californica* Conrad	California surf clam
Narrow dish clam	*Spisula catilliformis* (Conrad)	Dish clam
Hemphill dish clam	*Spisula hemphilli* (Dall)	Hemphill's surf clam
Gaper	*Tresus nuttalli* (Conrad)	Big neck, Pacific gaper, horse clam, gaper clam, summer clam, otter shell

Tellinidae—tellens

Designated common name	Scientific name	Other common names
Yellow apolymetis	*Florimetis obesa* (Deshayes)	
Bentnose clam	*Macoma nasuta* (Conrad)	Bentnose macoma, tellens, mud clam
White sandclam	*Macoma secta* (Conrad)	White macoma, white sand macoma, giant macoma
Bodega tellen	*Tellina bodegensis* Hinds	Tellen

Donacidae—wedge clams

Wedge clam	*Donax californicus* Conrad	California wedge clam, California bean clam
Bean clam	*Donax gouldii* Dall	Common Pacific wedge shell, little bean clam, Gould's wedge shell

Garidae—sunset clams

Sunset clam	*Gari californica* (Conrad)	California sunset shell
Deepwater gari	*Gari edentula* (Gobb)	Giant sunset shell, sunset clam
Purple clam	*Sanguinolaria nuttalli* Conrad	

Semelidae—semeles

Clipped semele	*Semele decisa* (Conrad)	Flat clam, bark semele

Solecurtidae—jackknife clams

California jackknife clam	*Tagelus californianus* (Conrad)	Short razor clam, California short razor, jackknife clam, razor clam

Solenidae—razor clams

Northern razor clam	*Siliqua patula* (Dixon)	Flat razor shell, Pacific razor clam, California razor fish, razor clam, sea clam
Rosy razor clam	*Solen rosaceus* Carpenter	Jackknife clam, razor clam
Sickle razor clam	*Solen sicarius* Gould	Blunt razor shell, jackknife clam, razor clam

Myidae—softshell clams

Softshell clam	*Mya arenaria* Linnaeus	Common mya, long clam, nanninose, soft clam, eastern softshell clam, mud clam
Checked borer	*Platyodon cancellatus* (Conrad)	Flat toothed clam, chubby mya, crossbarred broadtooth clam

Hiatellidae—borers

Geoduck	*Panopea generosa* (Gould)	Giant panopaea, geoduc, gweduc

Pholadidae—piddocks

Mud piddock	*Barnea subtruncata* (Sowerby)	Pacific piddock
Scalesided piddock	*Parapholas californica* (Conrad)	California piddock, borer, piddock
Flaptipped piddock	*Penitella penita* (Conrad)	Common piddock, rock piddock, borer
Wartnecked piddock	*Pholadidea ovoidea* (Gould)	Oval piddock
Rough piddock	*Zirfaea pilsbryi* Lowe	Pilsbry's piddock, piddock, borer

CLASS AMPHINEURA

ORDER NEOLORICATA

Acanthochitonidae—Spiny tunnics

Giant Pacific chiton	*Cryptochiton stelleri* (Middendorff)	Gumboot, giant chiton, gumboot chiton, giant sea cradle

Ischnochitonidae—scaly girdles

Conspicuous chiton	*Stenoplax conspicua* (Pilsbry)	Showy chiton, sea cradle
Lined chiton	*Tonicella lineata* (Wood)	Redlined chiton

Mopaliidae—thin tunnics

Black chiton	*Katharina tunicata* (Wood)	Black Katy chiton, black Katy
Mossy chiton	*Mopalia muscosa* Gould	Moss chiton, mossy mopalia

CLASS CEPHALOPODA

ORDER OCTOPODA

Octopodidae—octopi

Twospot octopus	*Octopus bimoculatus* (Verrill)	
Common octopus	*Octopus punctatus* (Gobb)	Devilfish

ORDER DECAPODA

Loliginidae—market squids

Market squid	*Loligo opalescens* Berry	Common squid, sea arrow, squid, opalescent squid, inkfish, calamari

ECHINODERMATA

CLASS ASTEROIDEA

ORDER SPINULOSA

Asterinidae—sea star

Sea bat	*Patiria miniata* (Brandt)	Webbed starfish, webbed seastar, batstar, bat starfish

ORDER FORCIPYLATA

Asteriidae—starfish

Giant spined starfish	*Pisaster giganteus* (Stimpson)	Giant starfish .knobby starfish, southern two-colored starfish, spiny star, contrasting colored starfish
Common starfish	*Pisaster ochraceus* (Brandt)	Purple starfish, ochre starfish

CLASS ECHINOIDEA

ORDER CAMARODONTA

Strongylocentrotidae—sea urchins

Fragil sea urchin	*Allocentrotus fragilis* (Jackson)	
Giant red sea urchin	*Strongylocentrotus franciscanus* (Agassiz)	Red sea urchin, giant red urchin
Purple sea urchin	*Strongylocentrotus purpuratus* (Stimpson)	Purple urchin

ORDER CLYPEASTROIDA

Scutellidae—sand dollars

Designated common name	Scientific name	Other common names
Sand dollar	*Dendraster excentricus* (Eschscholtz)	Common sand dollar

ORDER SPATANOIDA

Loveniidae—heart urchins

Heart urchin	*Lovenia cordiformis* Lutken	Sea porcupine

ARTHROPODA

CLASS CIRRIPEDIA

ORDER THORACICA

Balanidae—sessile barnacles

Big acorn barnacle	*Balanus cariosus* (Pallas)	
Common acorn barnacle	*Balanus glandula* Darwin	White buckshot barnacle
Large barnacle	*Balanus nubilus* Darwin	
Red and white barnacle	*Balanus tintinnabulum* (Linnaeus)	Pink barnacle
Thatched barnacle	*Tetraclita squamosa* Darwin	

Lepadidae—stalked barnacles

Pacific goose barnacle	*Mitella polymerus* (Sowerby)	Goose barnacle, gooseneck barnacle
Driftwood goose barnacle	*Lepas anatifera* Linnaeus	Ship goose barnacle

CLASS BRANCHIOPODA

ORDER ANOSTRACA

Artemiidae—brine shrimps

Brine shrimp	*Artemia salina* Leach	

CLASS MALACOSTRACA

ORDER DECOPODA

Peneidae—ridgeback prawns

Ridgeback prawn	*Eusicyonia ingentus* Burkenroad	

Pandalidae—ocean shrimps

Pacific ocean shrimp	*Pandalus jordani* Rathbun	Ocean shrimp
Spot prawn	*Pandalus platyceros* Brandt	

Hippolytidae—grass shrimps		
Red rock shrimp	*Hippolysmata californica* Stimpson	Red striped shrimp, large transparent shrimp, striped tidepool shrimp
Slender green shrimp	*Hippolyte californiensis* Holmes	
Redbanded transparent shrimp	*Spirontocaris picta* (Stimpson)	Brokenback shrimp
Crangonidae—snapping shrimps		
California pistol shrimp	*Crangon californiensis* (Holmes)	Pistol shrimp
Pistol shrimp	*Crangon dentipes* (Guerin)	Snapping shrimp
Cragonidae—bay shrimp		
Franciscan bay shrimp	*Crago franciscorum* (Stimpson)	California shrimp
Blacktailed bay shrimp	*Crago nigricauda* (Stimpson)	Blacktailed shrimp
Spotted bay shrimp	*Crago nigromaculata* (Lockington)	
Palinuridae—spiny lobsters		
California spiny lobster	*Panulirus interruptus* (Randall)	Rock lobsters
Callianassidae—ghost shrimps		
Beach ghost shrimp	*Callianassa affinis* Holmes	
Bay ghost shrimp	*Callianassa californiensis* Dana	Red ghost shrimp, California ghost shrimp, rockyshore ghost shrimp
Giant ghost shrimp	*Callianassa gigas* Dana	
Blue mud shrimp	*Upogebia pugettensis* (Dana)	
Paguridae—hermit crabs		
California giant hermit crab	*Holopagurus pilosus* Holmes	
California hermit crab	*Pagurus californiensis* (Benedict)	
Compressed wrist hermit crab	*Pagurus hemphillii* (Benedict)	
Hairy hermit crab	*Pagurus hirsutiusculus* (Dana)	
Blueclawed hermit crab	*Pagurus samuelis* (Stimpson)	
Lithodidae		
Box crab	*Lopholithodes foraminatus* (Stimpson)	
Galatheidae—shrimpbodied crabs		
Pelagic red crab	*Pleuroncodes planipes* Stimpson	Tuna crab, squat lobster, red crab
Albuneidae—mole crabs		
Spiny mole crab	*Blepharipoda occidentalis* Randall	Spiny sand crab, giant sand crab
Porcelain mole crab	*Lepidopa myops* Stimpson	Porcelain sand crab
Hippidae—sand crabs		
Sand crab	*Emerita analoga* (Stimpson)	Common sand crab
Porcellanidae—porcelain crabs		
Thickclawed porcelain crab	*Pachycheles rudis* Stimpson	Thickclawed crab
Flat porcelain crab	*Petrolisthes cinctipes* (Randall)	Porcelain crab

Leucosiidae—purple crabs

Designated common name	Scientific name	Other common names
Purple crab	*Randallia ornata* (Randall)	Globe crab, purple globe crab

Parthenopidae—elbow crabs

Elbow crab	*Heterocrypta occidentalis* (Dana)	

Inachidae—spider crabs

Shieldbacked kelp crab	*Pugettia producta* (Randall)	Northern kelp crab, kelp crab
Graceful kelp crab	*Pugettia gracilis* Dana	
Sheep crab	*Loxorhynchus grandis* Stimpson	
Champion masking crab	*Loxorhynchus crispatus* Stimpson	Moss covered crab, masking crab, moss crab
Graceful decorator crab	*Oregonia gracilis* Dana	

Cancridae—cancer crabs

Rock crab	*Cancer antennarius* Stimpson	Spotbellied rock crab, common rock crab
Yellow crab	*Cancer anthonyi* Rathbun	
Slender crab	*Cancer gracilis* Dana	
Dungeness crab	*Cancer magister* Dana	Market crab, edible crab, big crab, common crab, Pacific edible crab, Pacific coast edible crab, commercial crab

This species is called Dungeness crab in most areas along the Pacific coast of the United States and Canada. In California it has been called the market crab; however, to promote uniformity in the nomenclature of common names, we designate Dungeness crab as the common name in California.

Red crab	*Cancer productus* Randall	Red rock crab, rock crab

Portunidae—swimming crabs

Swimming crab	*Portunus xantusii* (Stimpson)	

Grapsidae—shore crabs

Purple shore crab	*Hemigrapsus nudus* (Dana)	
Yellow shore crab	*Hemigrapsus oregonensis* (Dana)	Mud crab, mudflat crab, green shore crab
Striped shore crab	*Pachygrapsus crassipes* Randall	Lined shore crab

Ocypodidae—fiddler crabs

Fiddler crab	*Uca crenulata* (Lockington)	

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